Cotton Textile Industry in Zambia:
The Economic Viability of Revamping Mulungushi Textiles Limited

By
Chiluba Mercy Munoni

Mini Dissertation presented in partial fulfilment of the requirements for the Degree of Master of Philosophy in Development Policy and Practice at the University of Cape Town

Supervisor: Professor Alan Hirsch

March 2017

DECLARATION

I, **Chiluba Mercy Munoni**, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

I empower the university to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

Signature: Signed by candidate

Signature removed

Date: March 13, 2017

ABSTRACT

The agriculture and manufacturing sectors have been identified and prioritized by the Zambian government as sectors that could contribute significantly to poverty reduction through industrialization and creation of employment. The cotton textile industry is one such industry that cuts across the two sectors.

This research paper focuses on the cotton textile industry in Zambia, with specific emphasis on Mulungushi Textiles Limited that was reopened by the Republican President, His Excellency, Mr. Edgar Chagwa Lungu in August 2016 after having been closed for about a decade. To this end, the main objective of the research paper is to analyze the economic viability of revamping Mulungushi Textiles Limited by focusing on determinants of viability which included; production cost, government policies and strategies, and institutional arrangements, among others.

The study analyzes mainly qualitatively both primary and secondary data. Primary data was principally sourced through interviews and observations, while secondary data was through online and physical sources such as books, reports and other written publications.

From the research findings, Mulungushi Textiles Limited factory machinery is obsolete and dilapidated to fully operationalize the business strategic units of ginning, spinning, weaving, dyeing and printing, garment production and cooking oil processing.

The study recommends that the factory should undergo a complete overhaul in the long run and in the short run, resume garment production which was identified to be a low hanging fruit.

The study concludes that, with the right investment, policies, strategies and concerted efforts from both the public and private sectors, revamping Mulungushi Textiles Limited is economically viable and has great potential to contribute to the government’s efforts in promoting inclusive growth through poverty reduction, particularly in rural areas where poverty is mostly prevalent.

ACKNOWLEDGEMENTS

I would like to express my heartfelt appreciation to Professor Alan Hirsch for his invaluable support and supervisory role in undertaking this research. His guidance, patience and kindness gave me strength to push on.

During my two year study at UCT, a number of lecturers contributed to shaping my research skills and most importantly, I would like to acknowledge Professor Brian Levy, who made me appreciate the concept of working with the grain; Professor Matt Andrews, who contributed greatly to my understanding of doing development differently; Professor Rajen Govender who made statistics easy and interesting; and to all the lecturers that contributed significantly to shaping my understanding and utilization of the knowledge acquired.

May I also take this opportunity to thank my classmates who became my family both in and away from Cape Town. Their honest sharing of experiences and knowledge played a key role and contributed greatly to my research, particularly, Mrs. Katongo Chifwepa, who was very encouraging and a mother to me; and Geoffrey Opio, my peer reviewer for most of my research papers undertaken during the program.

Furthermore, I would like to thank the people that gave me the opportunity to interview them during my research process, without their support, my dissertation would not have been grounded on realities.

Additionally, I would like to thank the Graduate School of Development Policy and Practice administration for their irreplaceable support in both academic and social circles, particularly, Nchimunya Hamukoma, Elvina Moosa and Marlene Powell, always went an extra mile in making my stay in Cape Town a memorable one.

Last but not the least, I would like to acknowledge the support of my two best friends, Remmy Kampamba and Monje Sichone, as well as my brother Kapya, who kept me in-check while undertaking my studies.

DEDICATION

This research paper is dedicated to my three kids, my twins, Chikondi and Mapalo and my young man, Shane. Your patience, understanding and love, gave me a reason to work harder.

All this was made possible by Jehovah, the Almighty God's promise, of giving me hope and a future (Jeremiah 29:11)!

TABLE OF CONTENTS

ACRONYMS

7NDP	Seventh National Development Plan
AGOA	African Growth and Opportunity Act
CAZ	Cotton Association of Zambia
CEEC	Citizens Economic Empowerment Commission
COMESA	Common Market for Eastern and Southern Africa
CP	Cooperating Partners
CSO	Central Statistics Office
DFID	Department for International Development
EBA	Everything But Arms
EU	European Union
FDI	Foreign Direct Investment
FISP	Farmer Input Support Program
FNDP	Fifth National Development Plan
FRA	Food Reserve Agency
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GMAC	Garment Manufacturers Association in Cambodia
GPP	Government Preferential Procurement
IDC	Industrial Development Corporation
JBIC	Japanese Bank for International Cooperation
JV	Joint Venture
LDC	Least Developed Country
M&E	Monitoring and Evaluation
MCTI	Ministry of Commerce, Trade and Industry
METL	Mohammed Enterprises Tanzania Limited
MFA	Multi-Fiber Arrangement
MFEZ	Multi Facility Economic Zone
MOU	Memorandum of Understanding
MSME	Micro, Small and Medium Enterprises
MTEF	Medium Term Expenditure Framework
MTL	Mulungushi Textiles Limited

NDP	National Development Plan
PDIA	Problem Driven Iterative Adaptation
PPP	Purchasing Power Parity
R&D	Research and development
R-SNDP	Revised Sixth National Development Plan
RECs	Regional Economic Community
ROO	Rules of Origin
SADC	Southern Africa Development Community
SAP	Structural Adjustment Program
SNDP	Sixth National Development Plan
SOE	State Owned Enterprise
TAZARA	Tanzania-Zambia Railway Authority
TEVET	Technical Education, Vocational Training and Entrepreneurship Training
TICAD	Tokyo International Conference on Africa Development
US$	United States Dollar
USA	United States of America
WTO	World Trade Organization
ZABS	Zambia Bureau of Standards
ZACCI	Zambia Chambers of Commerce and Industry
ZAM	Zambia Association of Manufacturers
ZDA	Zambia Development Agency
ZNFU	Zambia National Farmers' Union
ZNS	Zambia National Service
ZPPA	Zambia Public Procurement Authority

CHAPTER ONE

INTRODUCTION

1.1 Introduction and Research Problem

The manufacturing and agriculture sectors are areas that could be leveraged to contribute towards the development of a country and consequently its citizen's social welfare. As such, Zambia has prioritized these two sectors as a conduit for improving the livelihood of its people through industrialization and employment creation. In Zambia, agriculture is predominantly practiced in rural areas where poverty levels stood at 76.6 percent[1] as of 2015. The agriculture sector has the potential to contribute significantly to poverty reduction through employment creation and increased household income for the rural population. The other sector prioritized is manufacturing, which was identified as a source of quality employment creation through well-developed backward and forward linkages[2]. The cotton textile industry cuts across the two sectors (agriculture and manufacturing) and has the potential to contribute to increased household income and employment creation.

According to a World Bank Report (2016), the Zambian economy which is heavily dependent on copper exports, deteriorated considerably from August 2015 when global copper prices fell to 2009 levels. This drop significantly affected the Zambian economy and contributed to the aggressive depreciation of the local currency against the United States Dollar (US$) to more than 100 percent and inflation of above 20 percent, year-on-year (World Bank, 2016).

Furthermore, Zambia experienced domestic pressures in the form of: (i) repeated fiscal deficits (reducing confidence in the economy); (ii) a poor 2014-2015 harvest; and (iii) a power crisis with outages equal to half of peak demand, which contributed to GDP dropping to 3.2 percent in 2015 and 3.6 percent in 2016 (World Bank, 2017).

[1] Poverty figure from the 2015 Living Conditions Monitoring Survey, Key Findings, Central Statistics Office, Zambia.
[2] Backward linkage involves the services on the input supply side of the factory, such as supply of cotton, storage facilities, while, forward linkage, involves the services provided on the output side of the factory such as transport logistics, marketing, among others.

The World Bank estimated an improved GDP growth rate in medium term of 5-6 percent of the Zambian economy by 2018. Operationalization of the Mulungushi Textiles Limited is among government's plans to contribute to this growth.

According to the Mapping Sub-National Poverty in Zambia Report (World Bank and CSO, 2015), economic growth has not been inclusive and poverty is widespread, with 61.2 percent of the population estimated to be living below the national poverty line (US$ 1.9/ day PPP terms). The report further underscored that rural poverty at 76.6 percent was more than thrice the urban poverty of 23 percent. Sustained growth and continued political stability have produced only modest improvements in livelihoods and benefits accrued more to those already above the poverty line[3]. Growth has been primarily driven by mining, construction, and financial services, with modest job creation without creation of opportunities beyond the relatively small labor force in these industries.

It is on these premises that Zambia needs to diversify its sources of growth to sustain GDP growth, as well as to create employment for its fast growing, urban youthful population. Zambia's performance in job creation and poverty reduction have not been commensurate with its GDP growth - employment was estimated to have grown annually by only 3.1 percent on average in 2004-2014, less than half of its GDP growth (CSO, 2016). Despite a recent dash in export of non-copper merchandise, its economy remains overly-dependent on copper, which is concentrated in urban sectors. The CSO (2016) report further stated that, although mining accounts for 77 percent of total exports, the industry employs 1.7 percent of the total labor force (8.3 percent of total formal sector jobs). Overall, labor participation rates are falling whilst youth unemployment[4] is rising.

As per 2014 Labor Force Survey, youth unemployment was relatively high, at 10.5 percent of the 15 million population. In addition, with an 8 million working age, 6 million are employed, with 16 percent working in the formal sector and 84 percent in the informal sector.

[3] The 2015 poverty line was valued at K214.26 per adult equivalent (2015 Living Conditions Monitoring Survey)
[4] In Zambia, the unemployment rate measures the number of people actively looking for a job as a percentage of the labor force.

Therefore, for a more inclusive growth, productivity needs to be raised to work for the bottom 40 percent of the Zambian population, most of whom are employed in the agricultural sector. The cotton sector is one such sector that is labor intensive and capable of absorbing large numbers of unskilled and semi-skilled men and women workers, a view supported by McCormick and Rogerson (2004). Additionally, it was observed that offering employment opportunities and incorporating women into the economy has the potential to impact poverty levels in a positive way (Keane and te Velde, 2008; and Thomas, 2005).

The cotton textile industry in Zambia would seem to have huge potential to create massive jobs, both direct and indirect, as well as contribute significantly to growing the country's GDP. From the downstream (cotton farming), by being a ready market for seed cotton, the industry would create income for small scale farmers, who would form the majority of suppliers of cotton. Furthermore, the Zambian climate is very conducive for cotton farming, thus the high quality of cotton would fetch a premium price. This supported by the export of 99 percent of the cotton grown every year (CSO, 2016), would ensure positive contribution to both reduction in unemployment, poverty levels and GDP growth, all valuables ultimately resulting in improved social welfare.

The cotton textile industry, however, dwindled since the liberalization of the economy in the early 1990s due to a number of factors, such as, stiff competition from imports of cheap textile products, limited government support, and removal of subsidies, among others (Koyi 2006). Of the major textile companies that succumbed to these challenges was Mulungushi Textiles Limited (MTL). MTL employed over 2,000 direct workers who were left without jobs after the factory's closure in 2007 and this resulted in increased poverty levels in Kabwe Town where the factory is located. Since the closure of MTL, a lot of effort has been made by government in attempts to revamp it. If revived, MTL would create massive jobs for seed cotton farmers, factory workers, transporters, among many beneficiaries.

The question that this research paper attempts to answer is whether revamping Mulungushi Textiles Limited is economically viable, and why government has failed to revive MTL in the past as well as identification of factors that led to the closure of the factory. Furthermore, this research assesses the economic viability of operationalizing MTL, by analyzing its current state, possible investment and assessing its strategic business units by investigating the level of processing that would give it a comparative advantage.

1.2 Dissertation Structure

The paper has five chapters with each having sub-sections. Chapter one provides insights into the research problem, highlighting the cotton textile industry's contribution to poverty reduction, GDP and employment creation potential. The chapter further looks at the focus of the research, purpose and significance of the research, general and specific objectives, as well as the research hypothesis.

Chapter two reviews the literature on the cotton textile industry, from global level, narrowing to China, and then Ethiopia, China and Ethiopia being among the global and African leaders in the textile industry, respectively. The chapter further drills down to Zambia, detailing the history of the industry and then narrowing to Mulungushi Textiles Limited. In concluding the chapter, the importance of the textile industry is assessed.

Chapter three details the research methodology and highlights the data sources (both primary and secondary data), analyses the stakeholders and concludes with data collection limitations.

Chapter four discusses the main findings from the literature reviewed, observations and interviews conducted, highlighting the gaps existing in the textile industry in Zambia. Finally, chapter five concludes from the key findings, providing recommendations to support efforts of growing the cotton textile industry, as well as operationalization of Mulungushi Textiles Limited.

1.3 Research Focus

The Zambian economy has been heavily dependent on copper production even though the country is also rich in agricultural resources which mostly remain underutilized. Since gaining its independence in 1964, Zambia sustained a high rate of real growth up until 1974 when there was a 40 percent fall in copper price on international markets. Coupled with a number of other factors which included high prices of fuel, a weak manufacturing base and an underdeveloped agriculture sector, this meant that the effects of the low copper prices were transmitted to all other sectors of the economy. As a result of the effect of copper price fluctuations on the economy, Zambia embarked on a diversification program, to move the economy away from being over dependent on copper, into other sectors, particularly the agriculture sector (Dinh, 2013).

Mulungushi Textiles Limited that closed in 2007 after facing a number of challenges that are highlighted in depth in subsequent chapters, integrated the agriculture sector to the manufacturing sector. Due to its perceived potential to contribute to poverty reduction, the Government of Zambia made a series of attempts to revive Mulungushi Textiles Limited (MTL), which in the end was reopened in August 2016, with the target of creating 20,000 jobs in the five years to follow from operationalization of the factory.

This study therefore, focuses on the economic viability of Mulungushi Textiles Limited (MTL) and how it could create the much anticipated jobs through strengthened backward and forward linkages in the cotton textile industry in Zambia. The focus on MTL is derived from the visible efforts by the Zambian government in trying to promote job creation and industrialization, relative to the cotton textile industry being regarded as one of the drivers of such effort, being naturally labor intensive.

1.4 Purpose and Significance of the Research

Zambia has renewed its focus on industrialization and job creation as a way of addressing the high levels of poverty which stand at 76.6 percent in rural areas (CSO, 2015). The cotton textile industry is considered to be the first step into industrialization (Gereffi, 1999), however, government intervention in the cotton textile industry has been very general, without clear policies and strategies on how to improve/revamp the sector to benefit the poor average Zambian.

The Centre for Chinese Studies published a report entitled “Chinese Investors: Saving the Zambian Textile and Clothing Industry (2012)” which has a specific section on Mulungushi Textiles Limited. The report attempted to provide a brief background of the factory and highlighted key reasons why the factory failed. The report does not however, provide recommendations on measures of what MTL should have implemented to address the identified challenges.

The World Bank in 2013 published a report on Light Manufacturing in Zambia. The report has a chapter on “Textiles and Apparel”. The report provides a good overview of the textile industry in Zambia, highlighting the main competitive constraints of the industry as well as detailed recommendations. Despite the recommendations being general to the industry, they provide a basis for this research to narrow down to specific recommendations for MTL.

The government has in place a number of strategies and policies developed to prioritise agriculture and manufacturing sectors. These documents include, but not limited to: The Revised Sixth National Development Plan (2013 – 2016); the Industrialisation and Job Creation Strategy (2013 – 2016); The Micro, Small and Medium Enterprise Development Policy (2008); and the Zambia Development Agency Strategic Plan (2016 – 2020). These documents highlight the challenges that generally transcend to the two identified priority sectors under which the Cotton Textile Industry fall, Agriculture and Manufacturing. From the review of these documents, it is apparent that there are no specific actions to be undertaken to resolve the identified challenges and in most cases, the recommendations looked at the effects of the challenges and not the root cause. The identified challenges however, could provide a basis for the development of actionable recommendations for MTL.

This research, therefore, review the identified cotton textiles industry constraints, use the Problem Driven Iterative Adaptation (PDIA)[5] approach to develop a fishbone diagram that facilitate the identification of the root causes of MTL’s failure, which could help in developing actionable recommendations and progressive policy implementation.

[5] PDIA, is the process undertaken to address a problem, by using the cause-effect analysis and developing litle implementable actions, that are undertaken repeatedly to achieve the ultimate goal.

1.5 Research Objective

1.5.1 Overall Objective

The core objective of this research is to analyze the economic viability of revamping Mulungushi Textiles Limited.

1.5.2 Specific Research Objectives

The specific objectives are to:

i) Analyze the factors that originally and repeatedly led to the collapse of MTL;

ii) Analyze government policies, strategies, structures and support that are in place to ensure smooth operation of the MTL factory;

iii) Examine the status quo of factory infrastructure, supporting structures (i.e. transport logistics, utility services, skills availability), management and level of cotton processing; and

iv) Assess the backward and forward linkages that exist and could be created as a result of revamping the factory.

1.6 Research Hypothesis

With the right policies and strategies, functional institutional arrangements, as well as concerted effort by all key stakeholders in the cotton textile industry in Zambia, operationalizing Mulungushi Textiles Limited is economically viable.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on what has been written in the past about the cotton textile industry. The chapter also reviews literature on the global perspective of the cotton textile industry, and China's participation in the industry – with emphasis on the role played in Africa and narrowed it down to Zambia. Ethiopia is one of the African countries with records of success in the textile industry, therefore, reviewing literature on this country was considered to be important as it provided African context. The chapter concludes by highlighting the importance of cotton textile industry based on the literature reviewed.

2.2 Global Perspective of the Cotton Textile - The Cotton Textile Industry in General

Xiaoyang (2015) describes the cotton-textile-garment value chain as integral to the economies of many developing countries such as Botswana, Mozambique, Lesotho, Swaziland, Malawi, Tanzania, South Africa, Zimbabwe and Zambia. He further argues that cotton production provides income for smallholder farmers and that the textile and clothing manufacturers are large employers and could contribute to a country's economic growth.

Within the textiles and garment industry there is considerable diversity even though the industry is commonly assumed to be a homogeneous entity. In reality, Hill (1998) argues that the differences within the industry are such that a country is most unlikely, simultaneously, to have a comparative advantage in all its major sub-sectors. He further explains that although the industry is obviously closely linked in an input-output sense, it is important to appreciate that the presence of linkages per sector does not justify the establishment of a fully integrated industry. In addition, he elaborates that industries which are linked in an input-output (production) sense may not necessary share many common features in a comparative advantage sense, and it is the latter which will guide policy makers in judging whether an industry is likely to be viable at a particular stage in a country's economic development. From Zambia's perspective, this aspect is very important in understanding that revamping Mulungushi Textile does not necessarily mean carrying out all the processes, but focusing on stages of production in which it has a comparative advantage.

The cotton textile industry is generally divided into three main components, spinning, weaving and garments. According to Hill (1998), a more elaborate classification might distinguish between spinning and fibers and include separately smaller or ancillary activities such as knitting and dyeing. Table 1 summarises the key features of the industry in Vietnam and applies to most developing countries, under which category Zambia falls.

Table 1: Key Features of the Textile and Garment Industry in Vietnam

Feature	Spinning	Weaving	Garments
Factor Intensity	Capital intensive	Quite labor intensive	Very labor intensive
Economies of Scale	Significant	Moderate	Less important (except in international marketing)
Owners	Mainly government, and some foreign firms	Mainly government, some foreign and private domestic firms	Mainly government and private domestic firms
Vertical Integration	Common in spinning	Common in weaving	Present but less common
Size Distribution	Large firms dominate	Large-medium firms	Medium-small firms dominate
Market	95+ percent domestic	Mainly domestic, very small export	Mainly export

Source: Report - Vietnam Textiles and Garment Industry: Notable Achievements, Future Challenges

Speaking to Table 1, Hill (1998) elaborates that there are major differences within the industry, such as, spinning and garments being at the opposite ends of the spectrum defined in terms of various industrial organization and national policy attributes. As can be observed from Table 1, the spinning sub-sector is very capital intensive, scale of economies is significant, sales are predominantly domestic, firms are large, vertical integration among spinning and weaving units is quite common, and government and foreign owned firms dominate. He further argues that the garment industry is quite different, while spinning is above the manufacturing average for Vietnam in most of these attributes, garments is usually well below these averages, while the weaving sub-sector adopts an intermediate position along this spectrum.

With an understanding of these intra-industry differences, Hill (1998) proposes that it is important to analyze the various sub-sectors separately to the extent permitted by the industrial data base and policy regime to determine the sub-sectors in which a country possesses a comparative advantage. In the case of Vietnam, comparative advantage exists in garments and probably in weaving, but not so obvious in the case of spinning. This analysis of the sub-sectors is also very important in the Zambian case if the level of processing with comparative advantage is to be determined. Therefore, one of the expected outcomes of the research is to determine the level of processing at which Zambia has a comparative advantage in the cotton textile industry.

The next question is, "what government policies are likely to improve industry performance?" With regard to government policy in the cotton textile industry, Asuyama et.al (2012) give an example of Cambodia as a country that employed deliberate policies to improve the performance of the industry. According to these authors, Cambodia's Foreign Direct Investment (FDI) friendly policy made it possible to build up an export-oriented garment industry from scratch in a relatively short period. The Cambodian government provided very generous incentives for investors in the industry and these included:

i) 9 percent concessionary corporate income tax;
ii) Corporate income tax exemption (tax holiday) up to 8 years;
iii) Tax exemption for reinvestment in Cambodia and repatriation of profits or proceeds of investments;
iv) Import duty exemption on material and equipment; and
v) Export tax exemption.

In addition to these incentives, the authors further elaborate that through frequent dialogue among the various stakeholders including the Cambodian Government, the Garment Manufacturers Association in Cambodia (GMAC), labor unions, buyers, and International Labor Organisation (ILO), their various interests have been coordinated, thus contributing to the smooth and sustainable industry growth. Furthermore, Asuyama et al. (2012) argues that the Cambodian garment industry is characterized by frequent firm turnover. Comparing the GMAC member lists of 2003 and 2009, 47.2 percent of the 195 firms operating in 2003 exited before 2009, while 62.5 percent of the 273 firms operating in 2009 were newcomers that entered the industry after 2003. In sum, the entry of high-productivity firms and exit of low-productivity firms, contributed to improvement of the industry's average productivity. Therefore, from Cambodia's case, Zambia could learn that collapse of certain companies in the industry paves way for new firms with high productivity and sometime recapitalizing a failed company may only be a waste of resources. Hence, in revamping Mulungushi Textiles, it is important that such an assessment is made by the Zambian Government.

2.3 Chinese Cotton Textile Industry and its Investment in Africa

According to Fukunishi et al. (2013), between 2005 and 2011, the value of global apparel exports rose by 48 percent. Globally, apparel exports were worth US$412 billion in 2011. The top ten developing country suppliers now account for 58 percent of global exports, with China taking 37 percent of that share. Table 2 shows the top ten developing countries' apparel exports.

Table 2: Developing Country Suppliers and the Global Apparel Market

Exporter	Percentage change (2005-2011)	Percentage of total exports in 2011
China	107	37
Bangladesh	189	4.80
India	64	3.50
Turkey	18	3.40
Viet Nam	181	3.20
Indonesia	63	1.90
Mexico	-36	1.10

Exporter	Percentage change (2005-2011)	Percentage of total exports in 2011
Malaysia	84	1.10
Pakistan	26	1.10
Cambodia	83	1
World Total	48	

Source: Aid for Trade and Value Chains in Textiles and Apparel 2013 Report - WTO Database

Asian exports in particular have consolidated their role as the principal exporters of apparel products (Fukunishi et.al. 2013). Therefore, strengthening the already existing cooperation between China and Zambia, could lead to skills and technology transfer for the cotton textile industry in Zambia.

According to Xiaoyang (2014), the development of a cotton-textile-apparel value chain has proved to be remarkably important in the history of industrialization in various regions. He further states that industrial revolution in England in the eighteenth century started with a boom of textile manufacturing before spreading to other sectors. Additionally, in the East Asian miracle, the textile sector once again played a vital role. China has tried to catch up with advanced economies by first taking over labor intensive sectors, such as textile and apparel manufacturing, and then climbing up the value chain to more sophisticated industries (Xiaoyang, 2014). With regard to Africa, the author underscores that the textile manufacturing sector may greatly contribute to Africa's industrialization process and Asian companies' roles in this process are particularly intriguing since they are currently the major players in the world's textile market and an important customer in the cotton market.

Regarding competition in the global textile industry, Southeast African countries used to have booming textile and apparel sectors especially after the United States of America adopted the African Growth and Opportunity Act (AGOA) in 2000 (Xiaoyang, 2014). The author further explains that these African countries suffered a serious setback when the Multi-Fiber Agreement, an international trade agreement under the World Trade Organization (WTO), expired in 2005. As a result of this expiration, Asian countries are no longer limited by the quota system in the export destination markets and their low price allowed them to quickly grab a large portion of Africa's export market in the US and Europe, which has led to a number of African large factories closing down.

Other than the Asian countries taking over the export markets for African countries, Xiaoyang (2014) echoes that the textile products from Asian countries also flooded into Africa's domestic market, further threatening the existence of the remaining textile industries. This resulted in trade unions in South Africa, Zimbabwe, Mozambique, Lesotho, Swaziland and Zambia to react to the influx by issuing a joint statement in 2005 asserting that the textile and apparel industries and their workers faced fundamental challenge from the Chinese imports. The author further argues that China poses by far the largest threat to Africa's textile and apparel industries, with its textile exports to Southeast Africa exceeded US$2.3 billion in 2011, an increase of 62 percent over its US$1.4 billion in 2007. It is however, important to note that China is not the only Asian exporter of textiles and apparel to Africa, though the largest, India and Pakistan are behind at US$211 million and US$150 million, respectively, in 2011.

With regard to raw material sourcing, raw material sourcing by Asian countries from Africa has also been on an increase. Xiaoyang (2014) emphasizes that Asian countries are also becoming more present in Africa further down the cotton-textile value chain, in cotton acquisition and production. The author further states that an increasing number of Asian buyers are arriving in the region to engage directly in plantation, purchase and processing of cotton. In Zambia, the Chinese firms have penetrated so much that they even offer schemes to cotton farmers and have strategically located their ginneries in areas where cotton is grown.

On a positive note, Xiaoyang (2014) explains that besides trade, investment from Asian countries is shaping the development of the whole cotton-textile-apparel value chain in Africa, as most of the textile manufacturers in this region are of Asian origin. The author further states that production costs in China have been rapidly increasing in recent years and that some economists believe that the time is coming for Africa to take over apparel manufacturing from China. Additionally, the author suggests that Chinese investors will shift apparel making and other labor intensive manufacturing sectors to Africa and thus fuel African industrialization. It is on this note that Zambia is well positioned to either work with China to develop its cotton textile industry or take advantage of China's increased cost of production to become "a go to" country for FDI in the textile industry.

On government support and policy, Xiaoyang (2014) argues that Asian engagements are conditioned by African countries' policy framework, at the same time, the Asian engagements influence the governments' decisions. The author elaborates that in almost every cotton growing country, the government emphasizes value addition and processing of cotton and the governments do not want to be perceived as a mere provider of natural resources for Asia.

Asian ginners have brought to Africa their own approaches of production and management (Xiaoyang, 2014). The author further states that inputs and technical assistance provided by various Asian buyers contribute to the sector's technology advance. The author also observes that with their rapid development in Africa, Asian companies have made an impact on local communities and environment. An example was given on how the recycling practice in certain Asian ginneries has demonstrated to African people how to make full use of cotton products. After cotton is transformed into lint and oil is extracted from cotton seed, some Asian companies make the rest of the seeds into cakes for animal feed or use it as a fuel for boilers. Additionally, the grease-like substance from the extraction process can be used in soaps, and with such recycling, there is almost no waste from cotton processing.

2.4 Ethiopian Cotton Textile Industry

Ethiopia textile sub-sector is the third largest manufacturing industry in the country, after the food processing and beverage industry, and leather industry (Abebe, 2007). Abebe (2007) states that Ethiopia is endowed with favorable geographical and weather conditions and abundant water resources. Furthermore, the author elaborates that the country has cheap labor force, and that by means of processing of raw material, it is possible to upgrade industrialization level, and promote development of the whole economy. A report from AllAfrica.Com Stories[6] reported that there are a number of opportunities in Ethiopia for investment in the textile industry as the country has one of the cheapest electric power, and labor that is competitive and well established institutions that provide factory input.

[6] http://allafrica.com/stories/201602110790.html

Nonetheless, Ethiopia, just like most developing countries, faces challenges in the export sector that includes textile sector. The following are the major challenges according to Abebe (2007):

i) Poor management skills;
ii) Lack of access to international information and technology;
iii) Lack of skilled labor;
iv) Extensive informal sector;
v) Weak labor market institutions, with weak legal framework and lack of social dialogue among institutions;
vi) Outdated processing facilities in agricultural sector, and most products do not meet international standards;
vii) High cost of inputs in the manufacturing sector which affects competitiveness;
viii) Customs clearance delays;
ix) Insufficient textile and accessories suppliers, thus limited expansion in the apparel sector;
x) Lack of paved roads and communication infrastructure;
xi) Limited access to credit and foreign exchange; and
xii) Low capacity to meet Sanitary and Phytosanitary Measures (SPS).

As a result of these constraints, the author explains that raw materials are shipped to other countries for processing and packaging and subsequent export to the international markets, such as the United States of America and the European Union.

The Ethiopian Government has made deliberate efforts to provide support to the exporters to help them penetrate international markets through Export Trade Duty Incentive Scheme. This scheme relieves exporters from the burden of duties and taxes that add to the cost of export, which can make a significant impact on export competitiveness. The scheme comprises of three types of duty incentives; i) duty drawback, ii) Voucher scheme, and iii) bonded manufacturing warehouse.

According to Abebe (2007), the Ethiopian Government has been investing in capacity building for exporters to have skilled manpower. The author further explains that since there is scarcity of human resources in the textile sector, government has been training through schools and government training institutions to make available for investors. On access to finances, the author highlights that government gives 70 percent of the capital that investors use and only 30 percent is required from the investor. This is done through the Development Bank of Ethiopia.

As a result of government's deliberate policies to support the textile industry, Ethiopia is one of the fastest growing Apparel exporters in the world, having increased its export value from US$2 million in 2005 to US$35 million in 2011, by 2015 its export value had increased to US$100 million (WTO Database). These exports figures have been made possible through Ethiopia's achievement in market access both domestic and international. Ethiopia supplies designer stores such as, H&M, Tchibo, George, KIK, PVH, Alde, and VF, as well as the quota and duty free market access to the EU and US, and benefits from COMESA Free Trade Area.

A joint report by the Ethiopian government and the Netherlands (Ethiopia Business Opportunity Report, Textile and Apparel Industry), reported that in 2014, there were 108 number of textile and apparel companies in Ethiopia which employed a total of 37,484 workers.

Zambia could therefore, learn from Ethiopia on some of the policies in place to support the textile industry. The challenges faced by Ethiopia are very similar to the ones faced by investors in Zambia, such as lack of skilled manpower and high cost and in some cases non availability of finances.

2.5 Chinese Investment in Zambia

Due to historical ties through diplomacy and aid relations, the liberal investment climate and natural resources, Zambia has become a preferred destination for Chinese goods and investment (Eliassen, October 2012)[7]. According to Alves (2011), from 2000 to 2010 bilateral trade grew from US$108 million to US$2.85 billion, leaving China to become the second largest destination for Zambian copper export by the end of 2010.

[7] Zambia is one of the countries with the longest relationship with the Chinese government, building an embassy in Lusaka in 1964, followed by the TAZARA and the Mulungushi Textile Factory in 1960s and 1970s (Ferguson, 1999; Taylor, 2006).

The author argues that although increased bilateral trade has positive aspects, it also causes negative impact on national industry for at least two reasons. The first reason is on the appreciation of Zambian local currency – the appreciation of the Zambian kwacha due to the Chinese demand and import of copper, had a negative effect on Zambian exports such as textiles, as it made textiles more expensive in major markets. Asche and Schuller (2008) relates this scenario to the Dutch Disease, where appreciation of a local currency causes a series of side effects for other industries that compete in the export market. On the contrary, Zambia's currency depreciated by over 100 percent in 2015 and it has stabilized at that depreciated level. Therefore, with this argument, it is expected that MTL's products would be cheaper on the international markets. The second reason is on undermining export-oriented industrialization – the Chinese export of cheap consumer goods such as textiles and clothes undermines export-oriented industrialization in Zambia.

In the 2000s Chinese actors became an important source of Foreign Direct Investmet (FDI) in Zambia, the majority channeled through state owned enterprises (SOEs), concentrated in sectors such as mining, mining related activities and in infrastructure (Carmody, 2010; Koyi and Kamwanga, 2009; and Petersen and van der Luugt, 2010). Alves (2011) underscores that Chinese actors are now located in all sectors of the Zambian economy which include manufacturing, agriculture, technology, energy supply and telecommunications. In 2006, the Chinese government announced intentions of supporting and building economic zones in Zambia, and this necessitated the Zambian government in 2007 to pass Multi Facility Economic Zone (MFEZ)[8] regulations providing incentives and legislation for industry activity in the country. So far, the Chinese actors have developed two MFEZs; Chambishi on the Copperbelt and Lusaka East in Lusaka, which are the two zones in Zambia with records of success.

Compared to state-owned investments in mining and construction sectors, literature argues that smaller and privately owned investments from China will become more frequent and important in the future, although, some should be discouraged as it might cause displacement of local producers (Kragelund, 2009; Carmody and Hampanye, 2010). However, with well-regulated and developed backward and forward linkages with the local firms, Chinese investment has the potential of boosting domestic investment.

8

2.6 Cotton Textile Industry in Zambia

In the 1980s, Dinh (2013) highlights that under an import-substitution development strategy that included high tariff protection and government subsidies, Zambia had a vibrant textile and garment sector with more than 140 companies employing over 25,000 Zambians. However, due to a combination of macroeconomic shocks, the textile industry in Zambia greatly weakened and this resulted in closures of major companies in this sector. In reference to the factors that contributed to the deterioration of the sector, Dinh (2013) observes that there were both internal and external which included but not limited to overvalued exchange rate, flood of cheap used and donated clothing, lack of competitive input industry with reasonable prices, use of obsolescent machinery, and absence of skilled managers experienced with knowledge of global markets.

Following severe macroeconomic shocks, the government of Zambia could no longer afford subsidies and had to liberalize the trade regime as part of the structural adjustment reform program under the World Bank Group and the International Monetary Fund which resulted into mass closures of garment factories and scaling down of operations in the 1990s and the first decade of 2000s (Koyi, 2006). Eliassen (2012) analyses that the nZambia textile industry contracted from about 140 companies in 1991 to less than 50 by 2002. By 2004 only 10 of the remaining companies were able to compete on regional and other international markets and this number reduced further to 8 manufacturers in 2007. Further major companies closed down production after 2007 and they include:

i) Mulungushi Textiles Limited, in 2007;
ii) Swarp Spinning Mills, in 2008; and
iii) Kafue Textiles, in 2011.

Mulungushi Textiles Limited (MTL) was established in 1982 with full ownership of the factory by the Zambian Government. MTL is among the companies that were affected by the removal of government subsidies and protection. The company had two closures before the 2007 one, in the 1980s and 1990s. According to Elassen (2012), in 1995, the Chinese government proposed to turn MTL into a joint venture to which the Zambian government had no objection. The author further states that after engaging in negotiations, Zambia's outstanding loan from the initial Chinese investment in 1982 at the time MTL was being established, and the additional US$1.5 million, was converted to 66 percent shareholding in MTL. The shares were held by Qungdao Textile Corporation, a Chinese SOE. The remaining 34 percent for Zambia was held through the Ministry of Defence.

In the 1997, MTL was reopened as a joint venture under the new name of Zambia-China Mulungushi Textiles Joint Venture (ZCMT-JV), with both financial and technical support from China. The reopening of the factory gave hope and excited workers that were laid off during the closure and welcomed the move.

However, upon revamping of the factory, problems started. The first observed problem was the manner in which positions and remunerations were designed. According to Taylor (2006), the Chinese took over main management positions including the general manager position and chaired the board of directors as well. Other challenges included low efficiency, poor quality products and lack of reinvestment.

The mentioned challenges and many others, eventually led to the closure of the factory in 2007 and remained under the care of the Ministry of Defence.

In 2014, the government handed over MTL's assets to new proprietors, Mohammed Enterprises Tanzania Limited (METL) Company. According to media reports (Lusaka Voice, 2016), assets handed over included land, machinery and plant of MTL in Kabwe. According to the Zambia Daily Mail Report (2014), the lease between the MTL and the METL was to run for 12 years. However, within one year after taking over the company, the Tanzanian Company operating Mulungushi Textiles Limited had the contract cancelled after failing to satisfy government's operation demand requirements (Daily Nation, October 2016). The agreement had been for METL to revamp full processing and production at the factory, they instead used the factory as a warehouse for goods produced by subsidiary companies in Tanzania, these goods included fertilizers and detergent pastes.

On a positive note, the factory was reopened by the Republican President, His Excellency, Mr. Edgar Chagwa Lungu on August 1, 2016, as one of IDC[9] state owned enterprises (SOEs) under its portfolio.

[9]IDC's mandate is to play a catalytic role in deepening and supporting Zambia's industrialization capacity to promote job creation and domestic wealth formation across key economic sectors. The IDC plays its role through evaluation,

2.7 Importance of the Cotton Textile Industry

As earlier stated, the cotton textile industry has been used by some developing countries, such as Ethiopia and Lesotho to industrialize their economies. This statement is supported by Xiaoyang (2014), who underscores that the development of a cotton-textile-apparel value chain has been important in the history of industrialization in various regions. The following are some of the roles played by the cotton textile industry in promoting industrialization which has the potential of contributing to economic development.

2.7.1 Employment creation

As a typical light industry, the cotton textile is labor intensive, has low capital requirements, and spend little on research and development (McCormick and Rogerson, 2004; and Kamu, 2010). According to Eliassen (October 2012), the industry is capable of absorbing large numbers of unskilled and semi-skilled workers, it costs little to create one formal job in the sector, and in comparison to much of African industries, which tend to be dominated by men, the textile industry offers employment opportunities for both men and women. The author further explains that offering employment opportunities and incorporating women into the economy reduces poverty.

2.7.2 Transfer of skills and technology

The industry offers significant learning opportunities for unskilled and skilled workers, with potential to upgrade to more sophisticated goods (Brautigam, 2009; and Gereffi, 1999). According to these authors, contact with foreign firms can serve as a role model, and offer opportunity for skill transfer and subcontracting. Kamau (2010) and Brautigam (2009) further explain that the demand the industry creates for backward and forward links in the economy, such as cotton farming, ginning, spinning, weaving, designers, garment manufacturing, shops and so on, has obvious benefits to skills and employment creation in a national economy, and offer opportunities for industrial clusters and links.

---

pricing and lowering the investment risk profile by serving as co-investor alongside private sector investors. The IDC facilitates provision and raising of long term finance for projects. Simultaneously, IDC serves as an investment holding company for State-Owned Enterprises (SOEs) and new investments that ultimately generate earnings for the proposed Zambia Sovereign Wealth Fund.

2.7.3 Potential for trade and export earnings

Eliassen (October 2012) elaborates that in light of changes in global trading rules, Western countries grants preferential market access to support textile production and economic development in Least Developed Countries (LDCs). In particular, the European Union (EU) through Everything But Arms (EBA) and the USA through the African Growth and Opportunity Act (AGOA) offer preferential market access. Additionally, the author highlights that regionally, trade agreements within the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) offer opportunities for African countries such as Zambia to develop through trading in manufactured textile products.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter discusses the methodological approach followed in assessing the economic viability of revamping Mulungushi Textiles Limited (MTL), by way of testing the research hypothesis. The study is qualitative and makes use of both primary and secondary data in answering the following questions:

i) Is Mulungushi Textiles Limited economically viable?
ii) Why did government fail to revive MTL in the past? and
iii) What are the factors that led to the closure of the MTL factory?

The rest of the chapter discusses the sources of data and the types of data collected and answers the question of how the data was collected and analysed.

3.2 Secondary Data and Sources

Secondary data included published work, policy papers, discussions and working papers, conference papers, reports, government strategy and policy documents, journals, and peer reviewed written publications. These were accessed both physically and electronically, Google Scholar and JSTOR were Utilized to identify academic materials, while government/ official websites and ordinary google searches were used to identify policy documents, government strategies and journals.

The main literature sources included:

i) Eliassen (2012), "Chinese Investors: Saving the Zambian Textile and Clothing Industry";
ii) A report by the World Bank, authored by Dinh (2013), "Light Manufacturing in Zambia: Job Creation and Prosperity in a Resources-Based Economy";
iii) Koyi (2006)'s report, "The Textile and Clothing Industry in Zambia: The Future of the Textile and Clothing Industry in Sub-Saharan Africa";
iv) The government department of data collection, Central Statistical Office of Zambia survey, "2015 Living Conditions Monitoring Survey: Key Findings"; and

v) Finally, the World Bank in collaboration with the Central Statistical Office published a report in March 2015 titled “Mapping Sub-National Poverty in Zambia”.

These sources did not only provide data on Zambia, but also the general overview of the global Cotton Textile Industry. The data collected was on the state of the machinery at the MTL factory, the number of employees, the salary ranges for the employees, inputs into the factory, the types of outputs (products).

3.3 Primary Data Sources

The various stakeholders involved in the cotton textile industry were employed as sources of primary data. The sample size for the respondents/interviews were 42 and included; 3 from Kabwe District Council, 5 from Mulungushi Textiles Limited (MTL), 4 from Industrial Development Corporation (IDC), 6 from the Ministry of Commerce, Trade and Industry, 3 from the Ministry of Agriculture, 2 from Zambia Development Agency, 2 from Cotton Association of Zambia, 1 from Zambia National Farmers Union, 2 from Zambia Association of Manufacturers, 2 from Zambia Chambers of Commerce and Industry, 4 from textile companies (one from each), 5 from Cooperating Partners and 3 residents of Kabwe. The collection method was mainly by conducting in-person interviews, telephone, skype and observation. To a lesser extent, primary data was also collected through participation in textile related conferences and field visits to the textiles industries.

The interview guides where unstructured with the questions made flexible and adjusted to suit the demeanor, scope of knowledge and level of expertise of the respondents. Moreover, the interview questions were left open ended and respondents were free to express their views, ideas and opinions. It was categorically disclosed to the participants that the data collected were strictly for academic purposes and verbal consent to use a recorder and/or transcript was sought prior to conducting the interviews. Annex 3 provides details of the general interview guide questions.

3.4 Sampling Strategy

Respondents were selected from representative institutions of both the private and public sector using quota sampling approach which is non-probability sampling. This sampling method was used as the research topic is specialized to a group of people and requires representative data which could only be collected from respondents who were likely to be aware of the research topic. Furthermore, this method was ideal and less resource consuming considering the time constraints to carry out the research.

The Zambian Government provides policy direction across all sectors including the cotton textile industry. In the case study, Mulungushi Textiles Limited, is a State Owned Enterprise (SOE), which demonstrates government's hands-on involvement in the industry. The private sector is the engine of every economy, and since government policies and strategies are largely implemented by the private sector, the scope and content of these documents determine the very survival of these institutions as going concerns and largely the effectiveness of these policies being implemented. Thus, the need for close collaboration between the policy makers (government) and implementers (private sector) in the textile industry, provides a basis for focusing the sample selection on these two sectors.

Mulungushi Textiles Limited which is the case study under discussion was one of the institutions from which data were collected. The factory is located in Kabwe, the provincial headquarters of Central Province of Zambia. Kabwe District Council was among the institutions selected for the research as the local authorities are the primary drivers of economic growth in the provinces by keeping track of all activities in the district. Kabwe District houses both the Provincial Minister and Permanent Secretary who provided political and technical guidance, respectively. These two offices have deeper insight into the district and its economic activities than any other office outside the district. Particularly, they have a clear understanding of MTL and the impact of its closure on the local population.

In order to appreciate the challenges specific to MTL, the Management Team as well as the junior workers, who were there before its closure in 2007, were interviewed. To broaden the scope, four more textile companies that are currently operating were also sampled. The choice was driven by the fact that the economic landscape in Zambia has changed and so have the associated challenges in the textile industry. Therefore, the companies that are currently operating provided insights into what the current challenges are and provided recommendations on what needed to be done to create a conducive environment for the cotton textile industry to thrive in Zambia.

The Industrial Development Corporation (IDC) is an investment holding company for SOEs established under the Companies Act, Cap 349. Mulungushi Textile Limited is one such SOE in its portfolio and revamping it is among the various projects currently being driven by IDC. It was for this reason that IDC was an important respondent in this research.

The Ministry of Commerce, Trade and Industry is Zambia's principal government body responsible for administering national policy for private sector development, with five implementing statutory bodies, with two having direct benefit to the operations of Mulungushi Textiles Limited and these are; Zambia Development Agency (ZDA), and Citizen Economic Empowerment Commission (CEEC). ZDA's mandate is to bring about productive investment and CEEC's mandate is to promote the empowerment of citizens, thus their selection.

On the lower end of the cotton textile value chain is cotton seed that is grown by local farmers. With this critical input grown by the farmers, the inclusion of Ministry of Agriculture, Cotton Association of Zambia, Zambia National Farmers Union, among the stakeholders to be consulted, became imperatively key for this research. In addition, on the upper end of the value chain is manufacturing and marketing, thus the selection of Zambia Association of Manufacturers and Zambia Chamber of Commerce and Industry.

In order to appreciate the cotton textile industry in Zambia' status quo, companies operating in the sector were selected and these included; Sakiza Spinning Mills Limited, Mukuba Textile Limited, Unity Garments Limited and Kariba Textiles Limited. Details of the companies and the industry challenges are provided in Annex 1 and 2.

Furthermore, Zambia has a pool of development cooperating partners who provide both financial and technical assistance across sectors, hence the selection of the World Bank, African Development

Bank and Department of International Development as among the most prominent.

3.5 Data Analysis

In broad term, the interview guides were administered to three groups: i) Public Sector; ii) Private Sector; and iii) Cooperating Partners. Generally, all the guides had similar questions, particularly on issues related to their understanding of the textile industry in Zambia, and zeroed their view on revamping of Mulungushi Textile Limited, which is the case study for the research.

In order to triangulate[10] the collected data, validate the findings of the research and applicability of the method, both literature review and interviews were used. As such, data analysis methods used included textual analysis and documentary review for secondary data and continuous comparison of responses to the provided interview guide for primary data. To review the identified cotton textiles industry constraints, a fishbone diagram, which is one of the principles of Problem Driven Iterative Adaptation (PDIA)[11] approach, was developed that facilitated the identification of the root causes which could help in developing actionable recommendations and propose progressive policy implementation.

As the research is qualitative, the use of these methods in combination was guided by the understanding that they could support effective understanding, explaining and analyzing of the findings.

3.6 Limitations of the Study

The study had a number of limitations, top of which was the time constraint to conduct the research, as the sample size of respondents (42 respondents) were from various stakeholder institutions. Financial resources acted as an impediment to travel around the country with the cotton textile value chain dotted across the country, other key locations could not be reached as a result and data had to

[10] validation of data using cross verification from two or more sources
[11] PDIA, is the process of breaking down the outcome into small implementable actions that would be undertaken repeatedly to achieve the ultimate result.

be collected through telephone or email. Other equally important competing demands were work and family. The main study limitation, however, was the collection of data from Mulungushi Textiles Limited itself.

At the point when the factory was shut down, the Ministry of Defence was assigned to manage and protect the factory, to date, the factory still remains under its management. Interaction with the Defence wing of any country is challenging and collection of data is near impossible. In addition, the factory has been placed under IDC to operationalize and make it viable, needless to say, IDC is a political institution whose board chairperson is the Republican President with undue influence on its management. More so that during the process of conducting this research, the top three senior officials of IDC were dismissed by the President. This disrupted the research process as these were the individuals who facilitated the collection of data from MTL.

To circumvent this limitation and with the permission of IDC, the researcher volunteered to be part of the IDC team that was working on developing cotton out-grower schemes for MTL. This facilitated both formal and informal collection of data from the top management to the lowest ranked employee[12] and opened up doors to wider opinions and views of the operations of Mulungushi Textiles Limited, which in turn, increased the research findings' reliability.

[12] Both IDC and MTL were fully aware of my academic research and me being on the team was a way of them supporting my data collection.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discusses the findings from the information collected, observations and interviews conducted with regards to the revamping of Mulungushi Textiles Ltd that was closed in 2007 and reopened in August 2016. The chapter analyzes the cotton textile industry with regards to the following factors; government support, sector policies and strategies, institutional arrangements, input supply, and factory infrastructure.

Furthermore, an assessment of Mulungushi Textiles Limited (MTL) was undertaken, which focused on the factory's management, level of processing, refurbishment, market access, competitiveness, and collaboration with development Cooperating Partners.

In order to summarize the factors that led to the closure of MTL, a fishbone diagram has been used to analyze some of the root causes of the factory's failure.

4.2 Government Support

One point that cannot be over-emphasized is the need for government support for both the public and private sector to thrive and coexist. It was highlighted that during the boom of the cotton textile industry in Zambia, government provided significant support to the industry which included an incentive system that favored the entire manufacturing sector such as subsidies, import substitution, and high import duties. As the State Owned Enterprises (SOEs) financial support became unsustainable, it became inevitable to privatize some of them. The move to privatize was generally considered to be the best option at the time, however, criticism arose from the manner in which the whole process was undertaken. One of the key loophole identified was that government during the liberalization period, handed over the industry completely to private international organizations whose interest was on maximization of profits. It was felt that government should have gradually handed over the SOEs and maintained some minimal control to ensure its citizens were not exploited.

Therefore, government has to provide support by making collaborative efforts with the private sector to address the challenges facing the industry. To support this observation, Dinh (2013) argued that Zambia needed a delicate balance between the market and the state in developing the textile industry.

4.3 Government Policies and Strategies in the Cotton Textile Industry

4.3.1 Vision 2030

Zambia's Vision 2030 is aimed at establishing the country as "A Prosperous Middle-Income Nation by 2030". The Vision 2030 was launched in December 2006 and is the country's ever written long term plan. In as much as the Vision 2030 will be implemented for a long period (25 years), its realization depends on the successful implementation of medium-term development plans. The development plans run for 5 years and since Zambia gained its independence in 1964, 6 National Development Plans (NDP) have so far been implemented.

The 7NDP is under preparation and expected to be launched this year – 2017. During the implementation of all these NDPs, there is acknowledgement from the highest authority, the President, that successful implementation of NDPs and ultimately attainment of the Vision 2030 is dependent on the measures and actions undertaken by all stakeholders and these include government, individuals, private sector, civil society and cooperating partners. This observation is supported by the President at the time (2006), Levy Patrick Mwanawasa's foreword in the Vision 2030 where he acknowledged its realization being dependent on the concerted efforts by every Zambian.

Of the ten sectors in the Vision 2030, two of them directly affect the cotton textile industry and these are agriculture and manufacturing sectors. Under the agriculture sector, the vision is "An efficient, competitive, sustainable and export-led agriculture sector that assures food security and increased income by 2030[13]", while the manufacturing sector vision is "Technology based and export focused manufacturing sector, which is dynamic and competitive with effective entities that add value to the locally abundant natural resources by 2030".

[13] Direct quote from Vision 2030

Drawing from the two sectors' vision, the cotton textile industry and particularly, Mulungushi Textiles Limited, sits well in these visions. Under agriculture sector, MTL by its nature of using seed cotton as its primary raw material, which is grown by farmers, and mainly small scale farmers, has the potential of contributing to the reduction of poverty levels by providing ready and sustainable market for seed cotton, thus increasing income for farmers. Processing of seed cotton at any level is classified under manufacturing sector, and MTL from inception processed cotton from seed cotton to edible oil and garment, thus falling under the said sector. One of the goals of the Vision 2030 on manufacturing is to "develop a fully integrated rural based agro-based and light-manufacturing by 2030", which supports MTL's operations.

The Vision 2030 articulates the challenges that the economy is facing as well as the targets and goals to attain the vision of a prosperous mid-income Zambia by 2030, however, it does not provide clear actionable steps to be undertaken in attaining these goals. On agriculture and manufacturing sectors, the Vision 2030 has clear and measurable goals and targets but is silent on the steps to be undertaken to attain these goals. As the Vision 2030 is a long term plan, that may not provide details of the actual actions to be undertaken, the subsection that follows, assesses the National Development Plans (NDPs) support to the cotton textile industry.

4.3.2 National Development Plans

The common strength observed with the last two NDPs (Fifth National Development Plan and Sixth National Development Plan), is that they both prioritized the agriculture and manufacturing sectors, under which Mulungushi Textiles Limited fall. However, due to lack of specificity on how the plans were going to support the cotton textile industry, it was difficult to assess the impact of the NDPs on Mulungushi Textiles Limited.

Currently, government is in the process of developing the Seventh National Development Plan (7NDP) and is expected to be launched in the first half of 2017. The development process includes review of the previous NDPs, and there were some common challenges observed and needed to be considered in developing strategies around the NDPs. These challenges were important to note as they were observed to have contributed to the collapse of MTL and had the potential of affecting its future operations. These common challenges included:

i) Institutional arrangements and support were weak to facilitate development;
ii) Too many priority sectors covered over a period of five years;
iii) Not following the plan, too many unplanned programs coming in the middle of implementing the plan;
iv) Inadequate ownership and buy-in by all stakeholders; and
v) Limited linkage between the budget and plan.

Therefore, supporting institutions in the cotton textile industry such as Zambia Development Agency and the Cotton Association of Zambia, needed to ensure that the 7NDP tried to the extent possible to address these observed challenges if revamping MTL was to be sustainable. The section that follows, identified and analysed the roles played by key supporting institutions in the cotton textile industry that could support successful revamping of MTL.

4.4 Supporting Institutions Arrangements

Strong institutional arrangements are key to the success of any industry, and more so, with the cotton textile industry that has both backward and forward linkages. Well organized institutional arrangements provide a platform for addressing sector challenges particularly transaction costs as a result of asymmetric information. In the cotton textile industry in Zambia, the institutional arrangements continue to be weak as supported by Levy (2014) where the author states that the different players in the Zambia cotton sector made unilateral effort without involving other players.

The author further emphasizes that collective action never happens automatically as it takes leadership to facilitate cooperation among participants. Institutional arrangements could be established by either public or private sectors or both. According to Levy (2014), “But to be effective, government involvement would need to be flexible and differentiated, sufficiently agile to respond to the specific needs of the ‘island of effectiveness’ being supported”. From the private sector’s perspective, there was emphasis on government’s role in the institutional arrangements being clearly outlined and to be limited to that of facilitating rather than decision making.

Though weak, there is an established institutional arrangement in the cotton textile industry in Zambia which has several institutional players. These players are drawn from both the public and private sectors, and the most active, though to a limited extent, is the private sector. With government institutions, designated officers have responsibilities regarding the industry included in their job descriptions, generally, but just on paper. In the private sector, the following are the key institutions; Cotton association of Zambia (CAZ), Zambia National Farmers' Union (ZNFU), Zambia Association of Manufacturers (ZAM) and Zambia Association of Chamber of Commerce and Industry (ZACCI). From the government's side, the following are the institutions that have direct mandate in supporting the cotton textile industry; Ministry of Agriculture, Ministry of Commerce, Trade and Industry, Zambia Development Agency and the Industrial Development Corporation.

With government's support in establishing effective institutional arrangements, MTL could benefit from roles that each institution plays in the agriculture and manufacturing sectors such as provision of sector linkages, provision of sector information, as well as advocacy.

The sub section that follows provides details of IDC's support to MTL and how strengthening its autonomy has the potential to contribute to the successful operationalization of the factory.

4.4.1 Industrial Development Corporation (IDC)

The Industrial Development Corporation (IDC) is an investment holding company wholly owned by the Zambian Government which was incorporated in 2014. The main purpose of establishing the IDC was twofold: i) to diversify the economy away from mining to other sectors; and ii) to wean off the numerous state owned enterprises (SOEs) which continue to survive on subventions from government. IDC focusses on an all-encompassing spectrum of sectors which include; manufacturing, agriculture, forestry, financial services, tourism, medical, education, logistics, mining, telecommunication, energy, media and real estate. Under each sector, there are a number of SOEs that are among the portfolio of companies that IDC is managing.

Under the manufacturing sector, Mulungushi Textiles Limited is among the companies that are currently being developed. IDC's strategic business units for the factory which will form revenue sources are; ginnery, spinning, weaving, garments, beddings and cooking oil. IDC is confident that if the factory is fully capitalized and resourced, it could play a key role in job creation through backward and forward linkages. IDC recently signed an MOU with Cotton Association of Zambia (CAZ) to tap into its already existing farmers benefiting from its out-grower scheme. IDC's plan is to revamp MTL's out-grower schemes for sunflower and cotton to ensure smooth flow of raw materials into the factory.

Therefore, IDC is the core institution in revamping MTL that needs to coordinate other key institutions in the operationalization of the factory. However, IDC has faced challenges in operationalizing MTL. IDC faces serious political interference, which among others, is the Republican President being the Board Chairperson and the IDC Chief Executive Officer directly reporting to the President. This has led to subjectivity in the way IDC is managed and senior management operate under constant fear of being fired. These allegations are supported by the firing of the top three senior managers including the CEO, by the President under unclear circumstances, in November 2016. This case was not in the public domain, and the author got to know about it during the research process. The other challenge being faced by IDC is under staffing, which makes it difficult to execute certain tasks that require specialization. IDC is currently managing a portfolio worth over US$2 billion, covering 12 sectors and 30 SOEs with a total of 20 employees including non-technical staff. The other challenge is that many of these employees are from government institutions with no technical know-how on how to manage business entities like IDC.

To effectively manage IDC, there is need to institute some level of protection for senior management from the powers of the president of being hired and fired at his mercy as well as employ senior managers with business acumen, particularly those who have been in the private sector.

4.4.2 Challenges with institutional arrangements

Although there are established institutional arrangements in the cotton textile industry in Zambia, the key institutions operate in silos thus making it difficult to foster effective coordination among these institutions. Lack of awareness on how stakeholders could be supported by these institutions was also observed to be another challenge. It was pointed out that there was no information flow and only those who were already aware of the existence of the structures utilized them. In Zambia, there is a general challenge of coordination, be it private sector to private sector, government to government or private sector to government. Institutions interviewed expressed disappointment and lack of confidence in these institutions as most of the issues raised were never addressed and no specific institution was held accountable.

4.5 Input Supply

The planned strategic business units for the Mulungushi Textiles Limited are ginning, spinning, weaving, garments and cooking oil, which require quality and consistent supply of raw materials for the operation of the factory. With these strategic business units, MTL requires seed cotton and sunflower as its core raw material input. Zambia has a conducive climate to grow the two cash crops and with the right incentives and policies, Zambia could be self-sustaining in the supply of seed cotton and sunflower.

The biggest challenge in the farming of these two crops has been government's biasness in its policies and support to maize farming. Despite government's announcement to diversify away from maize, very little support was observed to be given to farmers growing other crops. Programs like farmer input support program (FISP) is perceived by farmers to be a program for maize farmers, despite the program supporting any input such as seed, fertilizer and chemicals. On a positive note, FISP has taken a twist as farmers are now being given e-vouchers that could be used to access any farming inputs from any authorized dealers dotted around the country, since in the past, government provided the inputs physically that were specific to maize farming.

4.5.1 Seed Cotton Supply

Seed cotton is the main raw material input into the cotton textile industry and Zambia has suitable climate condition for growing quality cotton. Growing of cotton in Zambia has been going on for over 40 years. The cotton sector is dominated by smallholder farmers and according to Cotton Association of Zambia, currently, there are approximately 350,000 - 450,000 smallholder farmers in the country, dotted around the 38 districts in five main provinces of Eastern, Central (the location of MTL), Muchinga, Southern and Lusaka. Therefore, cotton growing in Zambia remains one of the major sectors in the country which has potential to contribute, not only to improving incomes at household level but also to economic growth and in the end, contribute to poverty reduction.

One of the challenges that led to the closure of Mulungushi Textiles Limited was interrupted supply of seed cotton, particularly after the 2005/2006 farming season price saga that made farmers shun growing of cotton due to unfavorable pricing. According to the IGC (2012) working paper on potential of non-traditional exports in Zambia, 2006/2007 season cotton planting decreased by 40 percent, due to eroded confidence in the sub sector to the extent that farmers could not respond even to the increased preproduction prices. However, the report observed progressive growth in the production of cotton during the seasons of 2008/2009 and 2010/2011 with production approximated at 73,000 metric tonnes and 150,000 metric tonnes, respectively.

Therefore, to curb against such future interruptions, MTL signed an MOU with the Cotton Association of Zambia to engage cotton farmers and provide out-grower schemes to ensure guaranteed supply of seed cotton. The agreement was supposed to take effect during the 2016/2017 farming season, however, due to delayed funding by the Ministry of Finance to IDC, it was expected to get into effect during the 2017/2018 farming season. As per observation, smallholder cotton farmers' loyalty to out-grower scheme providers is very volatile, thus the need to ensure MTL/CAZ offer conditions that are better than competitors if the target of over 10,000 farmers growing cotton under their scheme, is to be achieved. Further, MTL is in discussion with traditional leaders in Central Province (where it is located) for traditional land of 2,000 hectares for cotton growing. The plan to grow cotton on the 2,000 hectares will provide a reliable and consistent seed cotton supply backup that MTL will own and ensure smooth supply of its main factory input – seed cotton.

The ensuing subsections discuss some of the identified challenges in cotton production that MTL may need to be aware of, provided by officers from the Ministry of Agriculture, Cotton Association of Zambia and the Zambia National Farmers Union.

4.5.1.1 Inadequate resources to invest into cotton production

Most small holder cotton farmers are at subsistence level which makes them vulnerable and dependent on the pre-financing of the cotton production by out - grower schemes. Even when farmers can access the basic inputs of seed, fertilizers and chemical to spray the crop, farmers still have the challenges to access farm equipment such as sprayer pumps and protective clothing, which impacts negatively on production.

4.5.1.2 Inadequate support from out-grower schemes

The pre-financed inputs in most cases are not adequate to allow small holder farmers to progress from subsistence. The out-grower companies do not, on the other hand, want to raise the risks for individual farmers. Further, cotton farmers not happy with the services offered by out-grower schemes providers are threatened by taking the services accessed to the promotion of other cash crops such as, soya beans, sunflower, groundnuts and cassava production. Thus, leaving the smallholder farmers voiceless.

4.5.1.3 Low Productivity

Poor field management skill is one of the major reasons for low productivity which is compounded with improper usage of inputs such as fertilizers and other chemicals. This is associated with low literacy levels of farmers. Sometimes however, expired chemicals are used which tend to be ineffective, hence having a negative impact on production. This is partly because multinational companies order the chemicals in bulk, which sometimes expire, but still find a way of distributing them, taking advantage of low literacy levels of the farmers. This impacts negatively on productivity.

4.5.1.4 Inadequate Extension Service

Most smallholder farmers[14] do not receive adequate extension services, from both the out-growers and the government extension workers. Adequate provision of extension services is cardinal in the production of cash crops such as cotton, especially with very low levels of literacy among small holder farmers, which makes application of certain knowledge and skills, such as chemical application, a challenge.

[14] Observation was made by the smallholder farmers interviewed, who expressed displeasure as most of the extension services were being channeled to commercial farmers.

4.5.1.5 Low Prices

Cotton prices are very volatile and farmers can only make meaningful profits if the crop is sold when prices are good on the international market. However, farmers are not able to hold the lint in anticipation of better prices mostly because the production is pre-financed and as such are obliged to sell to financiers, the multinational ginners. In most cases, farmers get very little, while the multinational ginners get the profits. This is partly why farmers who have been growing cotton for a long time have failed to progress but have remained dependent on out-grower schemes. This cannot trigger growth in the cotton growing areas.

4.5.1.6 The absence of a pricing model in the country

From the information provided by sector players interviewed, Zambia has not agreed on a pricing model, although there have been attempts to come up with one. In most African countries where cotton production has done well, such as Uganda, Tanzania and Burkina Faso, their respective governments were involved in coming up with the pricing model so that the small holder farmers get a fair share of income from cotton production (Delpeuch, 2011). In the Zambian case, it has been observed that multinational out-growers have formed cartels and can control, not only the prices of cotton at harvest but, the prices of inputs. The absence of a pricing model for lint cotton in the country has disadvantaged smallholder farmers on their ability to negotiate with the multinational companies. This has contributed to farmers' vulnerability and low prices for cotton. Consequently, smallholder farmers derive low income from cotton growing, which undermines the sector's potential to contribute to economic development.

4.5.1.7 Inadequate Training in entrepreneurship

There is a great potential to grow the sector through cotton value addition. However, lack of prerequisite knowledge in entrepreneurial skills among the cadre of field level staff necessary to effectively train and supervise cooperatives, posed a challenge to farmer groups[15]. In the absence of such trainings, it was unlikely that farmers, both at individual or groups would be innovative and develop viable businesses that can trigger linkages in the sector. These could easily develop into islands of growth and expand rapidly, with necessary supportive institutions and conducive policies.

[15] An observation by the Ministry of Agriculture officers interviewed.

4.5.1.8 Dependence on rain fed cotton production

Smallholder farmers in Zambia mostly grow rain fed cotton and rarely under irrigation, as they have limited financial capacity to invest in irrigation facilities. It was observed that growing cotton more than once a year under irrigation, has the potential to increase cotton production levels. More so, in seasons with inadequate rainfall, production was negatively affected as small holder farmers were not able to supplement rain water.

4.5.1.9 Attitude of small holder farmers

Some farmers still have the mentality of the pre-liberalized economy period where the state intervention bred dependence. One of the interviewees rightfully said "without positive attitude change and paradigm shift by other stakeholders, Zambian farmers have remained dependent on outside intervention". As such it is very difficult to expect growth in the sector and development in general.

4.5.2 Sunflower Supply

One of MTL's strategic units is production of edible oil whose main input is cotton seed and sunflower. Cotton seed is a by-product of ginning process, thus, the factory has the potential of being self-sustaining. However, sunflower should be sourced specifically for cooking oil production which is a smaller component of the factory's core business.

Sunflower, just like cotton, has the potential to contribute to poverty reduction through improvement of smallholder farmers' welfare. Conversely, sunflower productivity in Zambia has continued to be a challenge. Some of the observed challenges include but not limited to:

i) low utilization of yield improving inputs – due to lack of financial resources to buy seed from recommended dealers, smallholder farmers predominantly recycle sunflower seed which is kept from one's own previous harvest; and

ii) Crop management practices – as earlier stated, farmers in Zambia are used to farming maize which requires minimum management and technical knowhow. They therefore, tend to plant maize which they are familiar with early, and plant other crops like sunflower late which is not given the desired attention.

Considering the highlighted challenges, MTL could ensure there is continuous supply of quality sunflower if this part of its business has to be a success. From the interactions with IDC, it was observed that there is currently no plan on how it was going to ensure availability of sunflower. It is therefore important that MTL, comes up with strategies on how to ensure the factory has access to sustainable sources of sunflower

4.5.3 Storage Facilities

Seed cotton and sunflower, the main raw material input into Mulungushi Textiles Limited, are mainly produced by smallholder farmers who depend on seasonal rains and have either improper or completely no storage facilities. Zambia has only one rain season that lasts for 5 months (November, December, January, February and March), therefore, it's important for MTL to invest in appropriate storage facilities to ensure all year supply of this critical raw material.

From the tour of Mulungushi Textiles premises, for cotton storage facilities, it was observed that MTL has a concrete slab which when stocked is covered using tents. It is therefore important that MTL invests in adequate and appropriate storage facilities for the following reasons:

i) Cotton and sunflower is only harvested once a year in Zambia, therefore, there is need for proper storage facilities to ensure supply of raw materials throughout the year;
ii) For stock piling – the smallholders that grow these crops have no storage facilities, therefore, MTL has to buy all its year required quantity from these farmers all at once to ensure quality is not compromised;
iii) Proper storage facilities contribute to reduced cost of production as damage and theft of raw materials is reduced; and
iv) Considering the current storage facilities at MTL, investing in good facilities has the potential to preserve the environment and reduce on pollution.

The importance of storage facilities cannot be over emphasized, as compromised storage is likely to compromise quality of the raw materials that ultimately compromise the end product.

4.6 Factory Infrastructure

Goel (2002) defines infrastructure "as the physical framework of facilities through which goods and services are provided to the public. Its linkages to the economy are multiple and complex, because it affects production and consumption directly, creates positive and negative spill over effects and involves large inflow of expenditure". As per definition, the state of the infrastructure at Mulungushi Textiles Limited is very crucial to the successful and sustainable operationalisation of the factory as it directly affects production and consumption.

Mulungushi Textiles is an old factory constructed in the late 1970s and early 1980s, with very old infrastructure that was best for production then. The factory underwent minor face lifts in 1995[16] up until 2007 when it closed down and since then the infrastructure has remained the same. The sub-sections that follow assess the current status of key infrastructure and critics the strategy in place to ensure successful operationalisation of the factory.

The Mulungushi Textiles Limited buildings are old and have been existence over 30 years. Thus, considering the technological advancements that have taken place, the design of the building may not be suitable for modern day technology. The tour of the factory revealed very dilapidated and obsolete machinery that are rusted and damaged. Speaking to the factory management, the plan is to service some of the machinery so that some processing could begin immediately.

However, the machinery is so old that the company may lose more money in servicing than buying new ones. During the reopening of the factory in August 2016 by the Republican President, H.E Edgar C. Lungu, the ginning machinery was repaired and ginning of cotton was performed for the occasion. However, a tour of the factory few months later, the ginning machinery were still being repaired.

The challenge with closure of factories in Zambia is the way the closing process is conducted. For the spinning and weaving machinery, the machines were shut with materials in them. This has made

[16] In 1995 when the Chinese company, Qungdao Textile Corporation, bought 66 percent shares in MTL and replaced some of the factory's obsolete machinery.

it difficult to repair the machinery and has led to permanent damage to some of them. This is similar to how the Kapiri Mposhi Glass Factory, in the same province, was shut with liquid glass in the newly and expensively acquired machinery. The liquid glass hardened in the machinery, which rendered it useless. Therefore, it is important for government to come up with policies and laws that should govern closure of such processing plants to minimize avoidable future costs.

MTL's factory equipment is a heavy user of electricity. At the time the factory was built and operating, electricity supply was not an issue in the country. From late 2015 to date, Zambia has experienced intermittent supply of electricity due to the dwindled water levels at the Kariba Dam where hydro power is generated. The economy of Zambia mainly depends on hydro power and this has been affected by the below average rains that the country has experienced in the past few years. The supply of electricity has also been affected by lack of investment in expansion of existing supply and alternate sources. Due to the impact that electricity has had on manufacturing companies, government has reactively invested in alternative sources such as new hydro plants and solar plants. From the engagements with IDC, MTL has no immediate plans of investing in electricity supply as it expects national electricity supply to stabilize because of government's investment as well as the above average rainfall experienced in the 2016/2017 rain season.

Notwithstanding government's intervention in the supply of electricity which has currently reduced the number of load shedding hours, it is important that MTL invests in its own power source to ensure uninterruptable power supply when it is fully functional. Moreover, the demand for electricity keeps growing as the population grows and more factories emerge, therefore, despite its current investment, government may not be able to meet future electricity demand. The immediate options MTL may consider is investing in heavy duty fuel powered generators and solar panels. However, MTL would need to conduct a cost-benefit analysis on the best alternative energy source.

Kabwe district, where MTL is located, has clean and reliable water supply which is supplied by Lukanga Water and Sewerage Company, which is a private limited company wholly owned by the local authorities in Central Province. Therefore, the province has no challenges with water supply which is a good thing for MTL's factory. Regarding telecommunication, it was observed that the factory had old non-functional land phones. In this era, communication within and outside the factory is key to operations and reduces costs related to transmission and receiving of information, therefore, there is need for an upgrade on the telecommunication facilities at MTL.

During the tour of MTL's offices, it was observed that the offices had no computers and communication was only through their privately owned mobile phones. The author experienced first-hand challenges with this as MTL's management could not receive the interview questions for the research through email because MTL had no computers as well as internet connectivity. Furniture being used is also very old and thus there is need to seriously invest in office equipment to facilitate smooth operations in a safe and user friendly environment.

The road network within the factory was found to be in perfect condition and well connected. There is therefore very little, if any, investment in roads within the factory required. The road network connecting Kabwe with other towns, for raw material, finished products and other factory amenities, are in good condition. The government of Zambia has since 2011 embarked on roads construction and this has improved road network and has contributed to improved transportation facilities, thus making transporting reliable and cheaper, to some extent.

4.7 Management of Mulungushi Textiles Limited

Management of Mulungushi Textiles limited was among the factors that led to the closure of the factory in 2007. Despite government through the Ministry of Defence having had 34 percent shareholding, the Chinese Company with 66 percent, took over the management of the factory from 1995 to 2007, the time it closed.

Mulungushi Textile Limited, though still being managed by the Ministry of Defence, was handed over to the IDC. Therefore, at the moment, Ministry of Defence is reporting to IDC until such a time that IDC takes over completely. However, the 66 percent shareholding is still held by the Chinese state owned enterprise, Qingdao Textile Corporation. Currently, IDC is in discussion with the Chinese government to release the 66 percent shareholding which is expected to be done before June 2017. IDC's plan is to own 100 percent shareholding of the factor, revamp it successfully and make it viable and profitable, thereafter, sell majority of shares to the private sector.

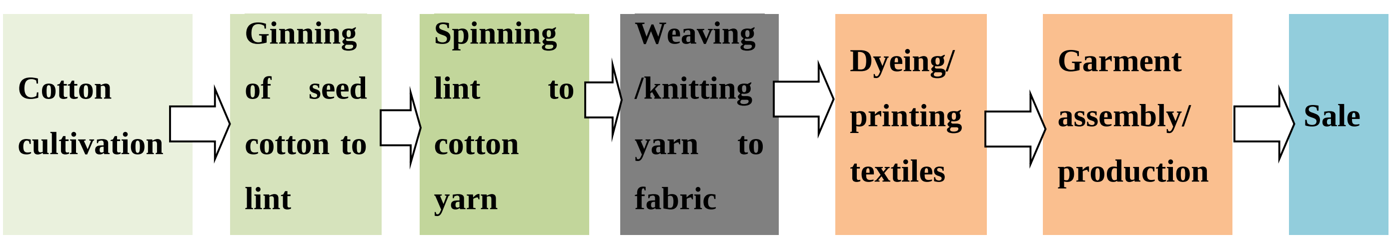
A tour of the factory and interviewing of the staff, revealed that the much of the current staff have been with MTL for over 20 years, including the people who were conducting repairs and maintenance works. It was observed that the factory management has strong network with former staff of the factory to the extent that all works were being done by former employees. However, with the advancement in technology, capacity building for employees was observed to be necessary, particularly if new machines and systems were going to be put in place, as per plan.

4.8 Mulungushi Textiles Limited Level of Processing

Mulungushi Textiles Limited was established to engage in the whole cotton supply chain, from seed cotton to finished garments. The factory ginned and spinned cotton, weaved yarn into textiles, dyed and printed gray cloth and made garments. The company's main product at the time was the African prints, commonly known as chitenge in Zambia (women's traditional wrappers). Additionally, the factory made shirts, bed sheets, shorts and khaki fabric, as well as cooking oil from cotton seed.

A tour of the factory revealed the dilapidated state of almost all the machinery, from ginning, spinning, weaving, to dyeing and printing machinery. The factory processing that took place at the time of the tour, October 2016, was the sewing of imported fabric into various public service uniforms. The sewing machines and steam irons seemed to be in a good condition, though not excellent, as they were using outdated technology. Figure 2 provides different stages involved in cotton processing.

Figure 1: Cotton Textile Value Chain



Source: *Author (drawn from the interviews and literature reviewed)*

Analysing the different processes involved, at cotton cultivation, MTL grew its own cotton, provided out-grower scheme services to cotton farmers and bought the deficit from farmers. The process of ginning involves removal of impurities from cotton. Ginning is an important determinant of the spinning quality of cotton fibre. Before its privatisation in 1995, Lint Company (Lintco) was set up by government to provide the ginning services to the industry, which also supported MTL in times that it had challenges with either the lint quantity or broken down ginning machinery. Even though privatisation of Lintco would be viewed as a negative move to MTL, it however led to the expansion in the number of privately owned ginneries with large investments in the area of seed cotton and lint, which still is the case. The challenge posed was however, the export of lint by the private ginners to international subsidiary processing factories, which made buying lint on the local market expensive. According to the experts in the textile industry[17], the significant part of the textile industry starts at the spinning level. Spinning is the process of making yarns from the ginned cotton, lint. The Zambian government just like at ginning level, established Swarp Spinning Mills which provided the spinning of lint into yarn services and supplied the textile industry, including MTL when need arose. However, the spinning company closed in 2008 and since then, there is no known firm that is spinning on a commercial scale.

The process of weaving is where two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Observations from the tour of the weaving section reviewed how old the machinery was and the threads that were running at the time the plant closed in 2007 where still in the machines. The machines still use the old technology of manually putting cotton threads into thousands of needle holes which took up so much man hours, and hence added to the cost of production.

The dyeing and printing machineries were also observed to be obsolete and rusted. The only section that seemed to have life in it was the garment section, where fabrics are sown into garments. At the time of touring the factory, this section was operational. Annex 1 provided details of the companies that are currently operational in the cotton textile in Zambia, by providing the products and the number of jobs the respective companies have.

Mulungushi Textiles Limited is a fully integrated textile mill, having the capacity to undertake all cotton textile process. However, in its current state, operationalising all its production processes

[17] Respondents from existing textile companies in Zambia, such as, Unity Garments Limited and Sakiza Spinning Mills Limited

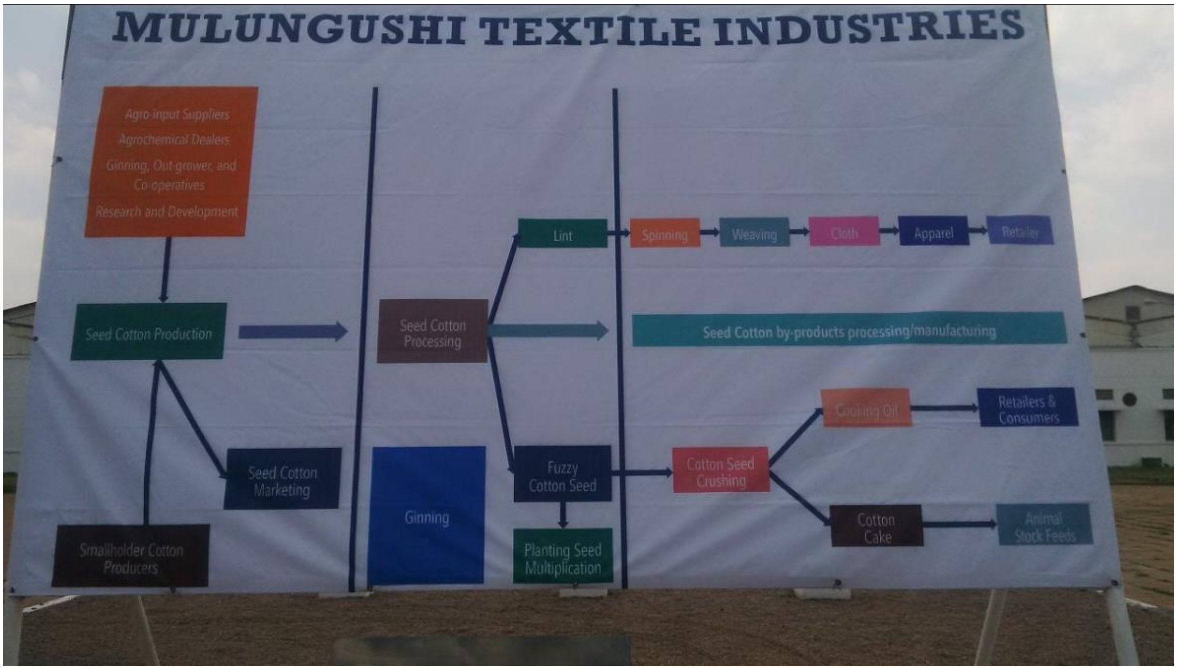
would be very costly and unsustainable, unless there is a complete overhaul of the factory. Figure 3 shows the status of some of the machinery of MTL factory.

Figure 2: Status of Mulungushi Textiles Machinery

Source: *Picture by the Author, September 2016*

As can be observed from figure 3, MTL machinery is obsolete and rusted to the extent that some of them cannot be repaired. A look at the cooking oil processing plant revealed that the machinery cannot be repaired but required to be completely uprooted and replaced with a new one. On cooking oil processing, the workers were of the view that the factory when operational should only process crude oil and sell to the more advanced local plants for refining, since there was lack of capacity to do so. The other reason was the huge purchase cost of refining machinery that would take up so much of MTL's capital that could be directed to its core strategic units of textile processing.

Figure 3: Planned Mulungushi Textiles Limited Cotton Value Chain



Source: *Picture by the Author, September 2016*

Figure 4 shows MTL's planned cotton value chain, from cotton cultivation to garment production, when fully operational. Considering the current state of the factory's machinery, it was observed that to keep the factory running, MTL should focus on garment production, the very last finished product in the cotton value chain until such a time when the machinery for other processes are either refurbished or completely replaced. Cheap fabric could be imported and used as input into its garment production rather than processing its own using very cost ineffective machinery, in their current state.

4.9 Refurbishment of Mulungushi Textiles Limited

Mulungushi Textiles Limited was officially reopened by the Zambian President, Edgar Chagwa Lungu, on August 01, 2016. During the reopening, the plant management repaired the ginning machine to showcase to the President that the factory could still operate with the old machinery. However, during his reopening speech, the President disclosed government's plan to invest US$15 million in reestablishing the plant.

According to IDC, the US$15 million is expected to be used over a period of 5 years broken down as follows:

- US$5 million for new machinery and plant;
- US$5 million for refurbishment of old machines and working capital; and
- The other US$5 million for cotton out-grower schemes.

However, considering the extent to which the factory machinery is dilapidated, more than US$15 million is required to fully operationalize the factory. IDC therefore, took the initiative of looking for more funds for a complete overhaul of the factory and had initiated discussions with **Marubeni of Japan**. During the Tokyo International Conference on Africa Development (TICAD) VI Summit held in Kenya in August 2016, the Japanese government pledged over US$30 billion to enhance industrialization across countries in Africa. At the same summit, IDC strategically signed an agreement with Marubeni for the financing of Mulungushi Textiles Limited's rehabilitation and establishment of cotton out-grower schemes.

According to IDC, the funds from Marubeni would be made available through the Japanese Bank for International Cooperation (JBIC) and the two parties (IDC and Marubeni) agreed to a complete rehabilitation of the plant, long term financing of the plant and production plans. They also agreed to cooperate in designing, manufacturing and production or processing of garments, lint, yarn, weaving, blankets, stock feed and crude cooking oil.

Marubeni Corporation, is a Japan-based trading conglomerate that operates in a broad range of sectors across the globe, which include but not limited to: Energy, infrastructure, finance, industrial machinery, information industry and logistics, and construction and real estate development. At the same time, Marubeni conducts business investment, development and management on a global level. Marubeni is a large corporation with presence in Europe, Asia and Africa, among others. In Africa, it has been working with the Angolan government in the textile industry, which is similar with its expected engagement in Zambia.

Due to the prolonged devastating war in Angola, 3 state owned enterprises in the textiles industry stopped their operations and therefore, the government of Angola engaged Marubeni for assistance in revamping the 3 factories. After signing an agreement, Marubeni started the process with a site investigation and proposed a rehabilitation plan which they have equipped with modern machines (state-of-the-art). Marubeni was given the full responsibility to procure textile and utility machines, install and build capacity of local employees. The rehabilitation was undertaken in a three phased approach, with each phase involving one factory, all phases having been undertaken for three years, from 2010 to 2012.

After signing the agreement, between IDC and Marubeni in August 2016, by October 2016, three groups of Marubeni experts had already conducted a comprehensive site investigation and are expected to submit proposed rehabilitation plan by end of February 2017. At the moment, preparations to pave way for Marubeni's works are in progress at MTL. IDC is confident that Marubeni is going to do a good job considering the similar works it has undertaken in Angola where the three factories are way bigger than MTL. The amount to be invested in MTL will be dependent on Marubeni's assessment of the factory, according to IDC. Marubeni's works are expected to resume by mid-2017 and last for 18 to 24 months. Currently, Marubeni is only expected to provide financial and technical support in operationalising the factory and the shareholding will be 100 percent IDC until such a time that IDC will be comfortable with the factory's viability that some shares will be sold to private investors, which may include Marubeni. It is however important that IDC puts up measures to ensure that history of the past shareholders in MTL does not repeat itself, of exporting quality lint and using poor quality in the local factory.

4.10 Market Access

Mulungushi Textiles Limited is located in Central Province and along one of the main roads in Zambia, Great North Road, making movement of goods to and from the factory easy. Before its closure in 2007, MTL had presence in both the domestic and international markets through establishment of retail markets within and outside the country. Using a marketing network, MTL had 18 stores dotted around the country in Kabwe, Lusaka, Chipata, Kasama and Solwezi. The company also had two subsidiary companies in Namibia and Tanzania and its products were sold throughout the countries in Southern Africa.

The only period that Zambia took advantage of the Africa Growth Opportunity Act (AGOA) was in 2000 when Mulungushi Textiles exported 11,000 shorts to the USA under AGOA, which still is the largest textile products single export to the USA by a local company in Zambia. It can therefore, be concluded that MTL had the capacity to produce textile products in accordance with international standards. It was also reported that from 2002 to 2003, MTL exported 2,000 tonnes of cotton to China where there was high demand, which was after meeting its own factory requirement.

However, it is worth noting that modern day technology has made competition stiff and only the strongest survive. At the time of Mulungushi Textiles flourishing, Asian countries had restrictions[18] on export of textile products into WTO members, which expired in 2005 and Mulungushi Textiles had to compete for the same market with Asian countries, particularly China that is way advanced in technology and well established in the industry.

4.10.1 Domestic Market

Currently, IDC has engaged government to give Mulungushi Textiles Limited preferential procurement for the supply of uniforms and protective work-suits to government institutions, which at the moment is being imported from outside the country. A tour of the plant revealed that the factory had already started receiving orders from government institutions such as the police, military and the Zambia National Service. The fabric used is outsourced through a bidding process to ensure transparency and some of the material used cannot be sourced locally.

The Zambian Government is one of the biggest buyers and any company supplying to government does so in large quantities. However, supplying to government has proved to be a risky business as it takes long to receive payments for the goods supplied, thus tying up capital. This has led to several local companies shunning supplying government. Therefore, it is important to ensure that from the onset, MTL enters into an agreement with government to make prompt payments and government should come up with deliberate policies and guidelines on how it is going to support government preferential procurement (GPP).

[18] Multi-Fibre Arrangement expired in 1995, taken over by Agreement on Textiles and Clothing (ATC)) which also expired on January 1, 2005.

4.10.2 International Market

Zambia is a member of a number of regional and multilateral arrangements that provide a ready market for its products and benefits from other international markets. Zambia is a member of the Common Market for Eastern and Southern Africa (COMESA) Free Trade Area that has 19 members and Zambia can export its textile products duty free in a number of these countries. Under COMESA, there are no export restrictions on the textile industry products, thus making it a lucrative market for Zambia's textile products.

Zambia is also a member of the Southern Africa Development Community (SADC) which has 15 partner states. Under SADC however, there are restrictions on Rules of Origin (ROO) for textile and apparel, which require double transformation. Double transformation entails to qualify for SADC preferential treatment, yarn and fabrics for manufacturing of garment must be produced from within the region. This was intended to promote integrated value chains for textiles by sourcing fabric and yarn from within the region and prevent garment trans-shipment from countries outside the SADC region. However, the double transformation rule has not yielded the expected results of spurring integrated value chains development, instead, it has stifled regional trade in textiles due to partner states' limited capacity to produce quality yarn and fabrics, as well as sufficient amounts. SADC Partner States have been pushing for the revision of the double transformation to a single transformation rule that would allow the use of imported yarn and fabric and remove restrictions on the source of materials for garment production from outside the SADC region.

Of the two Regional Economic Communities (RECs), Zambia trades more with SADC, South Africa being its major trading partner. Therefore, Zambia and particularly Mulungushi Textiles Limited, stand to benefit from the SADC market, more so, if the textiles and garment ROO are revised to single transformation rule. The single transformation will enable SADC countries, including Zambia to source its yarn and fabric for garment production outside the SADC region and be able to satisfy the SADC ROO. This will enable Zambia have free trade area access to the SADC countries for its garments and other textile products using quality yarn and fabric imported from outside the SADC region. Therefore, it is in the best interest of Zambia to push for the removal of stringent ROO on textiles and garments which is also in line with international practices, such as AGOA.

African Growth and Opportunity Act (AGOA) is a United States of America (USA) Act that was enacted in 2000 for an initial period of 8 years, extended a number of times, now goes up to 2025. The objective of the legislation is to significantly enhance access to the USA market for eligible Sub-Saharan African countries. However, a trade specialist from MCTI observed that eligible countries have no power to dispute the decision of the USA President, thus making AGOA's eligibility very unpredictable, which is an aspect that makes AGOA's non-reciprocal preferences different from the bilateral trade and other reciprocal agreements.

With regards to apparel, AGOA has full flexibility for eligible countries classified as lesser developed with regard to the sourcing of input materials, textile fabrics, while other countries have to source fabric locally or from another AGOA eligible country to satisfy the ROO required under AGOA. Zambia is one of the countries classified as a lesser developed country, and thus, can export garments made from fabric sourced anywhere and be able to export to the USA under AGOA. This is the market access that Mulungushi Textiles can take advantage of, even in its current state with regards to machinery. It may only ensure that quality fabric is sourced and well trained designers and tailors are recruited, since the garment production (tailoring) section was observed and reported to be in good condition.

The Economic Partnership Agreement (EPA) that Zambia has not yet signed also has potential of providing market access to the EU market. The EPA is an agreement between the EU and African, Caribbean and Pacific (ACP) countries and Zambia may benefit from this arrangement that will offer free trading (FTA).

4.11 Competition

Godfrey (2008) states that "competition is central to the operation of markets, and fosters innovation, productivity and growth, all of which create wealth and reduce poverty. However, markets do not always work well, and uncompetitive markets are often those that matter most for the poor". Contrary to Godfrey (2008)'s sentiments on how uncompetitive markets often matter for the poor, in Zambia, competition in the textiles industry has worked for the poor. This has been made possible through high quality and cheap imports as well as good second hand clothes. This competition has been to the benefit of the local consumers, particularly the poor, meanwhile, the producers whose products cannot compete with the imported garments have been put at a disadvantage.

Mulungushi Textiles Limited is one of the companies in Zambia that succumbed to stiff competition in the textile industry. Unlimited and unregulated imports of second hand clothes, that came into the country, mainly as donations and charities from developed countries, became competition to companies that produced garments.

The other competition at the time was influx of cheap garments from China after the end of the Multi-Fibre Agreement (MFA) in 2005. The expiring of the MFA entailed that countries like China that had quotas and other restrictions on the export of apparel and textile products where no longer in place. Before MFA expired, China is one of the countries that invested in the African apparel and textile industry so as to have access to markets that it had restrictions on. After the MFA expired, a number of Chinese companies moved back to China and competed with countries like Zambia for the same domestic and international markets.

Zambia, like most developing countries, suffers from competition distortion that could only be addressed if governments, that are the policy makers, are well equipped with tools and skills to identify and assess the nature of competition and its impact on the local industry. Donated second hand clothes, is one example that distorts competition, because, these clothes usually come in duty free and exempted from all taxes that apply to local producers, such as value added tax as well as excise duty. Cheap poor quality garments that flooded the local market in the late 1990s and early 2000s, equally distorted competition in Zambia. In both cases, if government was equipped and was able to identify and assess the impact attributed to influx of imported garments, some of the companies that went under may have survived.

The private sector has likened the taking over of MTL by IDC (which is wholly owned by government) as being retrogressive and taking the textiles industry back to the period of nationalization and distortion of competition through subsidies and other company specific government support. Fear of closing out existing and emerging private sector owned companies in the textile industry was expressed. Their recommendation was for government to attract private sector investors and have minimal government direct participation in the industry, and only play a facilitative role. IDC, however, indicated that its taking over MTL was to ensure that it was successfully revamped and thereafter, sell shares to investors. IDC's sentiments were that "investors want to invest where all the dirty work has been done, and bring in their money where they are assured of success. This environment can only be created by government, that is our role".

4.12 Contribution to the Cotton Textile Industry by Donors Operating in Zambia

Zambia has had a good relationship with donors who are usually referred to as Cooperating Partners (CPs). These CPs have provided a number of support in different sectors that include agriculture and manufacturing under which MTL falls. This section analyses cooperation between the Zambian government and the CPs. Some of the key CPs operating in Zambia include but not limited to; the World Bank, the African Development Bank and Department for International Development (DFID).

From the interview sessions with CPs, it was generally observed that CPs in Zambia support sectors that are prioritized by government and intervene where there is a formal request by government for a CP to provide either technical, financial support or both. Therefore, government provides direction and guidance to CPs, thus it is very important that government is clear and specific to the support that it wants from the CPs. However, this has not been the practice on the ground, CPs identify areas of support and government either agrees or disagrees and usually does not guide CPs on areas requiring their support. This in the author's view has led to CPs supporting areas that are of interest to them and not to the general public at large. As most of the interventions are not in line with government's priority areas, implementation of such projects has been a challenge across all CPs.

The majority of CPs align their support to a government based on the country policies and strategies. In the earlier sections, an analysis of the Zambian key policies and strategies was conducted and it was concluded that the documents are either silent on the cotton textile industry or not specific on the support to be provided. It is therefore important that government develops strategies and policies that are specific and actionable to enable CPs provide guided support. For example, the World Bank develops Country Partnership Strategies (CPS) that run for three years and are anchored on government documents like the Vision 2030 and the National Development Plans. The World Bank

CPS is a document that anchors the Bank supported projects and other support.

From the results of the interviews, CPs support to the cotton textile industry in Zambia has been limited to analytics and advisory services. This is where CPs produce reports on the sector by conducting research and proposing recommendations on how best to develop a specific sector. A number of reports were cited to have been produced that have a section on the cotton textile industry in Zambia such as Light Manufacturing in Zambia (World Bank, 2013) and Fashionomics – Investing in the Creative Industries (African Development Bank, 2016). The Zambian government through IDC, could therefore be more strategic on how it engages CPs and in this case, it may consider selling some of MTL's ownership shares cheaply to Marubeni. This would build strengthen the relationship between MTL and the Japanese government which could result in accessing concessional loans from Japan for capital equipment. This is not a new phenomenon for MTL, as it happened in 1995 where the Chinese Company, Qingdao converted its loan into shares in MTL.

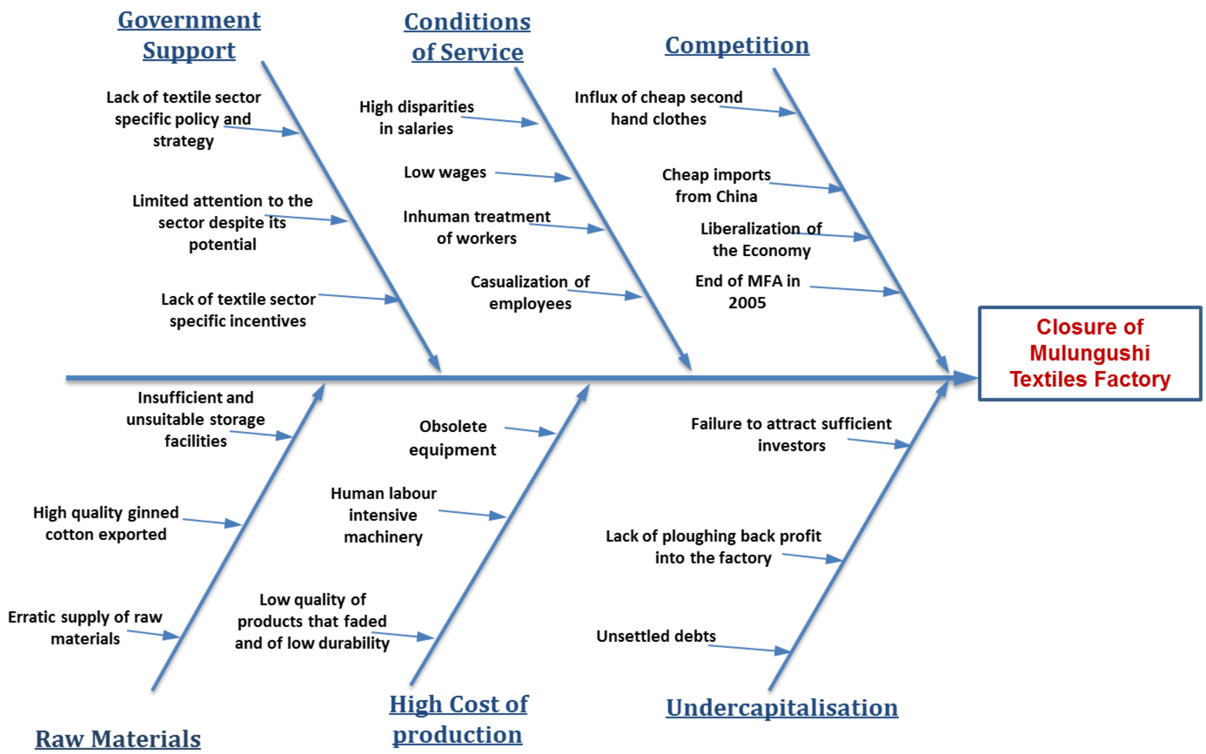
4.13 Why Mulungushi Textiles Limited Collapsed?

The preceding sections analyzed in details the factors that contributed to the collapse of MTL. This section used the fishbone diagram to summarize the root causes of MTL's failure which was observed to be necessary and a stepping stone to the subsequent chapter that focus on the research recommendations and conclusions.

4.13.1 Fishbone Diagram

In conducting an in-depth problem analysis of the closure of Mulungushi Textiles Limited, a fishbone diagram was used to present the key factors that led to the collapse of the factory in a diagram form. A fishbone diagram is a tool that is used to analyze the root causes and effects of a problem. In this instance, six causes were identified; competition, conditions of service, government support, raw materials, high cost of production and undercapitalization. The highlighted causes, per interviews conducted, led to the closure of Mulungushi Textiles Limited, which is the effect. **Annex 2** presents some of the current challenges being faced by the Zambian Cotton Textile Industry, while, Figure 5 illustrates the cause and effect analysis of Mulungushi Textiles Limited's challenges using a fishbone diagram.

Figure 4: Fishbone Diagram – Cause-Effect Analysis of Mulungushi Textiles Limited's Failure



Source: *Author using information gathered through interviews*

4.13.2 Causes of Mulungushi Textiles Limited's Failure

The majority of the causes of MTL's failure outlined in the fishbone diagram have already been discussed in the previous sub-sections, except for conditions of service, high cost of production and undercapitalization, which are covered in the ensuing subsections.

4.13.2.1 Conditions of Service – Labor Relations

From 1997 to the time of its closure in 2007, Mulungushi Textiles Limited was a Joint Venture with a Chinese Company, Qingdao Textile Corporation which held the majority shares, 66 percent leaving 34 percent to the Zambian Government. This meant that the decisions and operations of the factory were undertaken by the Chinese Company. Some of the challenges highlighted regarding the workforce included the disparity in salaries between the Chinese and the Zambian employees. It was mentioned that the Chinese Assistant Manager at the time was paid Zambian Kwacha 17 million, meanwhile, the Zambian Deputy General Manager, holding a higher position than the Chinese, was paid Zambian Kwacha 3.5 million, more than four times less.

According to the results of the interviews, low wages and working conditions were highlighted to be some of the key issues that led to the factory's closure. One of the inhuman treatment of factory workers was the locking up of employees on night shift in the factory to minimize unnecessary movements and pilferage. The Chinese management introduced casual labor practices which gradually expanded and the management ignored access to basic services and protection and workers were paid very low or no wage. The failure to successfully negotiate better wages which was partly attributed to language and cultural barrier, led to negativity and eventually resulted in riots and strikes. To curb this animosity, the Zambian government in 2006 introduced minimum wage and the Chinese responded by paying the very minimum wage which left the workers feeling betrayed and therefore reignited labor unrest which continued up until the closure of the factory.

4.13.2.2 High Cost of Production and Undercapitalization

Since its opening in the early 1980's, very little investment has gone into replacement of machinery. When the Chinese took over in 1997, they replaced some machinery with second hand machines from subsidiary companies that were no longer in use, but were better than the ones at MTL. During the tour of the factory, it was observed that the majority of the equipment were not only obsolete but damaged and rusted. Most of the current machines were very labor intensive and costly in terms of maintenance. Labor and maintenance costs were highlighted to be some of the major costs that contributed to MTL's high production cost.

From the interviews, it was pointed out that the factory was undercapitalized as most of MTL's clients failed to settle their debts, thus holding up capital. Some of the clients included the Zambian government institutions, particularly during government general elections when MTL was used to print campaign materials. MTL also failed to lure enough investment for the factory and this is supported by Elliassen (2012) who stated that, "although efforts were made to attract investments for recapitalization, in addition to effort made by management and shareholders to revive the factory, it was not enough for the factory to remain in production". Some of the former employees of the factory interviewed accused the Chinese company of remitting all its profits to China without leaving any for reinvestment and likened this behavior to MTL being a cow that was only milked without being fed.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter four, presents the conclusion and key recommendations based on the main findings of the research. The section is arranged around government policies and support, institutional arrangements, factory operations and the factory's potential to contribute to poverty reduction. Finally, concluding remarks highlighting key messages of the research paper as well as recommendations for future research concludes the paper.

5.2 Government Policies and Support

Government, through consultations with stakeholders, develops policies and strategies, some of which cover all sectors and others are specific to a sector. On top of government's agenda is the development of the agriculture and manufacturing sectors, under which the cotton textile industry falls. Recognition has been given to the potential that the two sectors have in terms of promoting industrialization and creation of jobs, which ultimately result in poverty reduction. Zambia's growth is not inclusive, as 40.8 percent of Zambians live in extreme poverty, while 76.6 percent of the rural population being poor[19]. Disparities in the countries living conditions are as high as the poorest province (Western Province) having 82.2 percent of its population poor, while the least poor province (Lusaka Province) having 20.2 percent. Therefore, the operationalization of Mulungushi Textiles Limited has government support, which increases its chances of success.

5.2.1 National Development Plans

Government through the new Ministry of National Development Planning is in the process of developing the 7th National Development Plan (7NDP) which will cover 2017-2021. From the research findings, the main challenge with the preceding NDPs has been their inability to provide sector specific interventions. This is therefore, yet another opportunity for government to develop a

[19] 2015 Zambia's Living Conditions Monitoring Survey

five-year plan that has specific plans and strategies on how it is going to build the agriculture and manufacturing sectors. Government may consider inclusion of specific targets such as the expected number of jobs to be created per sector and stipulate the exact activities to be undertaken to create these jobs.

To ensure inclusive growth, particularly for the agriculture sector, rural people should be widely consulted to ensure their challenges are taken on board, since agriculture in these areas is more prominent than in urban areas. In Zambia, there is a tendency of concentrating on urban areas or consulting representative organizations like ZNFU that provide general challenges of the sector. However, to develop policies and strategies that are targeted towards specific areas and that would make economic sense to the targeted areas, direct consultations need to be undertaken. For example, areas that grow cotton are known and therefore, for cotton subsector specific targets and strategies, these are the areas to consult.

Currently, government is in a hurry to develop the economy, which on one hand is a good thing, however, due to tight timelines, relevant stakeholders are being left out which may result in resentment of government interventions. Therefore, in order to ensure buy-in and participation of key stakeholders, enough time need to be allocated for consultative processes involving important documents such as development of the 7NDP.

5.2.2 Sector Policies and Strategies

Zambia has no specific policies and strategies on how it intends to develop the cotton textile industry. Despite the many political pronouncements on the importance of the cotton textile industry in contributing to economic development, government has not provided direction on how the industry is to be developed. To this end, it is important that government develops a sector specific policy on which strategies should be anchored with clear targets and actionable steps to be undertaken to achieve its intended objective.

In order to support the cotton textile industry, it is recommended that government develops broad but separate “Agriculture Policy” and “Manufacturing Policy” that will provide policy direction for all agriculture and manufacturing sub-sectors, including cotton/textile production. However, for the cotton textile industry, an industry specific strategy should be developed "Cotton Textile Industry Strategy". This strategy should cover both the agriculture and manufacturing side of the industry, as this will ensure easy coordination and synchronization of industry interventions.

5.2.3 Government Support

Government support in the successful operationalization of Mulungushi Textiles Limited (MTL) is very important. Line ministries mainly provide policy direction that are implemented by Statutory Bodies and other stakeholders. Therefore, it is important that implementers are fully involved in the formulation of policies and strategies which they are to implement. Currently, there is a disconnect between line ministries and implementing agencies, which has resulted in government developing policies and strategies that look good on paper but difficult to implement. The recommendation is that government facilitates the engagement of implementers and other cooperating partners in developing policies and strategies. The existing consultation structures such as Sector Advisory Groups and Technical Working Groups could be strengthened to ensure coordination between policy formulation and its implementation.

MTL was initially a state-owned enterprise which arrangement failed to work and there are still examples of SOEs that are struggling and government keeps pumping financial resources for them to continue operating. Government therefore, may consider leaving the majority shareholding of MTL in the hands of the private sector and maintain minimal shares to ensure its citizens are not exploited. During the early stages, the author agrees with IDC's strategy of allowing government to support the operationalization of MTL, but should have a clear road map on how the shares will be sold to private investors. As at now, nationalization of MTL is not an option!

Some of the factors that continue affecting the existing companies in the cotton textile industry are second hand clothes and cheap imports. Government could support the industry by invoking some of the regional agreements provisions such as protection of infant industries, that would enable Zambia put in place measures to restrict the amount of second hand clothes imported by charging import duties.

5.3 Institutional Arrangements

As was observed in previous sections, institutional arrangements exist in the cotton textile industry in Zambia, they only need to be reinforced. Government could once more play a facilitating role in bringing the institutions together and creating a platform for dialogue. Roles and responsibilities need to be clearly stipulated and well defined reporting mechanism need to be in place. Sector players should be made aware of institutions available and where to report and follow up on sector issues. Government may support building of confidence and trust in the structures by ensuring that there is proper feedback system in place and that reported issues are resolved and responsible institutions are held accountable.

In the case of revamping MTL, ZDA could be made to facilitate, IDC coordinate and MCTI, Ministry of Finance (MoF) together with MOA provide oversight and policy direction.

To ensure, functional institutional arrangements, strong dialogue systems need to be created, such as private sector to private sector, public sector to public sector and private sector to public sector. The key institutions in the cotton textile industry that MTL would need to work closely include: Cotton Association of Zambia, Zambian National Farmers' Union, Zambia Association of Manufacturers, Zambia Chamber of Commerce and Industry, Ministry of Commerce, Trade and Industry, Ministry of Agriculture, Ministry of Finance, Zambia Development Agency and Industrial Development Corporation.

To ensure establishment of dialogue among these key institutions, it is recommended that a "Cotton Textile National Working Group" is formed, having membership of key industry players, particularly the ones listed in the previous paragraph. Terms of reference of the working group and responsibilities of each key member institution could be stipulated and specific meeting dates outlined. From the findings, there are some already existing working groups that the cotton textile industry could fit in, however, they were observed to cover all sectors that has a likelihood of diluting the attention that the cotton textile industry requires at the moment.

5.4 Factory Operations

5.4.1 Factory Capitalization

Mulungushi Textiles Limited needs huge investment to bring it to full operationalization. Government already pledged to provide US$15 million over a five-year period. However, considering the budget deficits that the Zambian government continue to experience, the flow of these resources may not come as expected. Undercapitalization of the factory was one of the factors that contributed to the closure of the factory in 2007, therefore, it is recommended that MTL continue looking for investment partners and firms up its already signed agreement with the Japanese company, Marubeni to ensure availability of finances.

The current agreement between IDC and Marubeni, is for Marubeni to provide a loan whose value will be determined by Marubeni's assessment of the factory to bring it to full operationalization. Considering that the majority of the current factory equipment is a complete write off (obsolete and dilapidated), is recommended that government considers selling some of MTL's ownership shares to Marubeni. If this recommendation is entered strategically, MTL could benefit from cheap loans as well as access factory equipment cheaply from Japan.

5.4.2 Availability of Raw Materials

One of the factors that contributed to the closure of MTL in 2007 was the erratic supply of cotton to the factory. From the research findings, it was reviewed that the Chinese company that was managing the factory at the time exported the quality ginned cotton and used non-quality lint which compromised the quality of the grey cloth weaved in the factory.

In order to ensure continuous and sufficient supply of cotton to the factory, MTL should invest in out-grower schemes and invest into its own farm to grow cotton, which plans are already under consideration. As it will be competing with already established international organizations like NWK and Cargill for out-grower schemes, it's important that MTL offers better conditions to farmers who are very sensitive to price variations, no matter how insignificant. Government currently has a reputation of delivering farming inputs late, MTL should ensure that farmers under its schemes are among the first to receive cotton as well as sunflower inputs, so as to attract more farmers to join its scheme.

Considering that MTL did not have a strategy for sunflower sourcing at the time of conducting the research, the following are the proposed recommendations to ensure sustainable and reliable supply:

- Introduction of out-grower schemes for sunflower farmers;
- Working with the Ministry of Agriculture in providing extension services and technologies which include usage of first generation seeds, fungicides and fertilizers;
- Encouraging good production methods such as planting early and keeping the fields free from weeds, which may affect productivity; and
- In future, just like its strategy on cotton, MTL may consider acquiring its own piece of land for growing sunflower to shield the factory from external factors affecting production.

Storage facilities is another challenge that MTL faced. Currently there are modern shades and cotton suitable storage facilities that have come up. Cotton storage is as important as the style of growing it, since they both affect the quality of lint. The recommendation would be that IDC invests into proper storage facilities, for both the raw materials and finished products.

If some ownership shares would be sold to Marubeni, MTL would have to ensure that history does not repeat itself, of having quality lint exported to other international subsidiaries. This should be part of the transfer of ownership shares agreement.

5.4.3 Labor Relations

The uprising of MTL's workers in 2007 was what finally led to the closure of the factory, which is one of the factors that should be taken seriously as efforts are being made to revamp the factory. This uprising contributed to government coming up with a minimum wage bill. At the time, this did not help as the Chinese management complied with the law and paid the very minimum wage which was considered insufficient by the workers.

Zambia's labor laws have been strengthened which if properly enforced, will contribute to MTL's employees' motivation. Casualization in the civil service has been abolished and this is what is required of all employers in Zambia and the minimum wage has been revised. From the interviews with the former employees of MTL, conditions of service were considered to be the main challenge that led to the closure of the factory and they are optimistic that with the new management (government), this challenge will be handled with the importance it deserves.

It is therefore highly recommended that IDC ensures that conditions of service are clearly outlined for both local and international employees which should only be improved upon if ownership and management of MTL is transferred to the private sector, to which it is also recommended that government maintains some shares to provide checks and balances.

5.4.4 Factory Management

The management of MTL is still by the Ministry of Defence, while Industrial Development Corporation (IDC), being MTL's holding company, is co-managing with the Ministry of Defence. There is need for Ministry of Defence to completely hand over management of MTL to IDC to ensure quick decisions are made on the operationalization of the factory and to minimize conflicts. The two management teams' roles were observed to be unclear.

Ministry of Defence was brought in to manage and protect the factory at the time of its closure and despite the factory having been handed over to IDC, the Ministry is still managing the factory to some extent. Government therefore, needs to come up with a clear plan of handing over Mulungushi Textiles Limited to IDC. The continued management of the factory by the Defence Force has negative connotation among the residents and employees, as they have perceived the move to be that of government not yet sure of revamping the factory, thus the continued management by the Ministry of Defence.

5.4.5 MTL's Business Strategic Units

MTL's reopening strategy is to operationalize all its strategic business units at once, that's ginning, spinning, weaving, garment production and cooking oil processing. Considering the state of the factory machinery and the available resources, MTL should consider focusing on garment production using imported quality fabric. This section could be strengthened by hiring well trained tailors and building capacity to be able to produce garments to international standards. The other two critical issues that would make developing the garment section competitive are management effectiveness and labour productivity. If these two issues are dealt with strategically, the garment section has the potential of providing finances to revamp other sections of the factory.

Moreover, countries like Lesotho have developed their textile industry by focusing on garment production using imported fabric and export to the USA under AGOA as well as other developed countries. Lesotho also supplies South African chain stores all over the Southern Africa region.

Therefore, sequencing operationalization of strategic business units will be very crucial to the successful revamping of MTL, as some units like garment production are immediate, while some require medium to long-term interventions.

5.4.6 Competition

Competition is one of the factors identified during the research findings of having contributed to MTL's closure. After complete liberalization of the Zambian economy in the early 1990s, there has influx of second hand clothes and low quality Chinese textile products that compete with locally produced ones.

It is therefore recommended that the Zambian government comes up with laws to regulate the import and selling of second and low quality clothes. This could be done through high import duty and other taxes on second-hand clothes and through Zambia Bureau of Standards (ZABs) come up with quality standards for imported fabric and clothes. Kenya is an example of a country in Africa that has successfully managed to regulate influx of second hand clothes. MTL and IDC may wish to learn from Kenya on how they managed to do so.

5.5 Market Access

It is clear from the findings that supplying goods to government holds up the supplier's capital as government takes time to pay and at times completely fails to pay. Mulungushi Textiles Limited has had first-hand experience of delayed and non-payments by government. From the interviews with IDC, their market focus for garment is government from whom they have managed to get preferential procurement. Since MTL's garment quality is not yet known and trusted by other domestic and international markets, government is a good start and provides an opportunity for MTL to learn and polish the art of designing and tailoring.

Nonetheless, MTL should consider supplying government as a stepping stone of getting into bigger, reliable and more profit markets. To ensure a good business relationship between government and MTL, rules of engagement need to be clearly outlined, by stating the maximum period for which payments are to be delayed. To ensure compliance of the laid down rules, a monitoring mechanism should be developed with clear and stringent penalties for delayed payments by government as well as delayed supply of goods by MTL. This way, both parties will be made to comply with laid down rules of engagement.

For the domestic market, MTL could also explore the possibility of supplying the mines with protective clothes, mutton cloths and other textile products requirements. On international market, Zambia could make use of its membership to the COMESA and SADC free trade areas as well as its AGOA eligibility. However, since these markets already face a lot of competition from not only regional countries but also highly competitive countries in the sector like China, MTL needs to devise a comprehensive and well targeted marketing strategy, identifying its strategic markets and niches. It may also explore producing products that are on high demand but in low supply after conducting a market survey. In a highly competitive environment, for a firm to survive, it needs to be very innovative and adjusting to changes in tastes before rendering itself outdated. Hence, in the long run, MTL will need to invest in research and development to remain relevant in the dynamic world of competition and become a market leader in some of the new innovations.

Regarding market access, the issue of hard infrastructure, particularly, transport, is very paramount to accessing both local and international markets. Currently, the transport network still requires a lot of attention and the transport cost is one of the highest in the region. The issue of transport network and high costs have the potential of making Zambian textile products uncompetitive, moreso that the country is landlocked.

5.6 Cooperating Partners' Engagement

It is clear from the research findings that cooperating partner's (international organization) such as the World Bank, African Development Bank, United Nations, Department for International Development, among others, aid a country based on the beneficiary country's strategies and policies. Therefore, it is important that a country has specific and clear areas outlined in its national policies and plans to guide CPs support. In Zambia, strategies and policies are general in nature and this has led CPs' support and interventions directed to areas of their interest and not national priority areas. To this end, Zambia needs to provide clear guidance to CPs support by developing strategies that are sector specific with clear targets and activities to be undertaken to achieve the targets. Importantly, government needs to take a leading role and be strict on its engagement with CPs to ensure interventions are directed to national priority areas.

In Africa, Tanzania is one example that has made the best out of CPs by engaging them in policy formulation and getting their buy-in during preparation, thus CPs active participation in implementing national projects. In the short run, MTL could cease the opportunity of ensuring that the 7NDP under preparation outlines specific cotton textile industry targets and activities supporting development of the industry. This in turn, would be a window for targeted CPs support and support to the sector would be anchored on the plan, which is what donors want.

5.7 Conclusion

The research paper analyzed the contribution that would be made towards poverty reduction which is currently sitting at 76.6 percent in rural areas if Mulungushi Textiles Limited was to be operationalized in an economically viable way. From the findings, MTL would contribute to poverty reduction through jobs creation and industrialization by developing deliberate and specific activities to support the backward and forward linkages.

In order for MTL to be economically viable, it was observed that sufficient investment is required to conduct a complete factory overhaul as most of the machinery is obsolete and in bad condition. It was recommended that the machinery should be replaced other than repaired if production was going to be profitable, otherwise production cost regarding repairing and maintenance would be too high rendering the factory operations economically unviable. The research findings assessed all the factory's planned strategic business units of ginning, spinning, weaving, dyeing and printing, garment production and cooking oil processing, and revealed that MTL's short run comparative advantage lies in garment production as the sewing machines were in good condition and quality fabric could be sourced from international markets. It also provided a detailed analysis of government policies, institutional arrangements, competition, market access and management issues and highlighted how they could constrain and impact on the successful operationalization of MTL.

With concerted effort by government, the private sector and development cooperating partners, the findings of the research support the hypothesis that operationalizing Mulungushi Textiles Limited is economically viable.

5.8 Recommendation for Future Research

This research paper identified and analyzed the factors that led to the closure of Mulungushi Textiles Limited and highlighted some of the policy challenges that were still at play and could affect government's efforts in revamping the factory. It also provided actionable recommendations that could be adopted in ensuring that MTL's operationalization is economically viable.

Recognizing government's current stance in promoting inclusive growth by focusing on manufacturing and agriculture as sectors that have significant potential to contribute to poverty reduction through creation of jobs, a comprehensive study could be undertaken. This study could focus on how government and all the stakeholders could work together in developing effective and meaningful backward and forward linkages in the cotton textile industry that could ultimately result in the creation of quality jobs. The findings of this study could be a good complement to this research paper.

REFERENCES

Aid for Trade and Value Chains in Textiles and Apparel 2013 Report - WTO Database

Asuyama Y., Dalin C., et al; 2012; “firm Dynamics in the Cambodia Garment Industry: Firm Turnover, Productivity Growth, and Wage Profile under Trade Liberalisation.” Mimeo. Institute of Developing Economies.

Brautigam D. (2009): The Dragon’s Gift – The real story of China in Africa. New York: Oxford University Press.

Carmody P.; 2010: Globalisation in Africa: Recolonialisation or Renaissance Boulder, CO: Lynnee Rienner Publishers.

Carmody P. and Hampwaye G.; 2010: Inclusive or Exclusive Globalisation? Zambia’s economy and Asian Investment. Africa Today Vo.56, No.3, Pg 84-102.

Delpeuch C.; October 2011: African Cotton Markets at Crossroads, Will the Price Spike Turn into a New Kick-Start? Policy Research Working Paper 584, The World Bank, Poverty Reduction and Economic Management Network, International Trade Department.

Eliassen I. E.; October 2012; Chinese Investors: Saving the Zambian Textile and Clothing Industry; Centre for Chinese Studies, Stellenbosch University

Ethiopia Business Opportunity Report, 2014, Textile and Apparel Industry

Ferguson J.; 1999: Expectations of Modernity – Myths and Meanings of Urban Life on the Zambian Copperbelt: University of Califonia Press Ltd.

Fukunishi T., Goto K., and Yamagata T.; 2013; Aid for Trade and Value Chains in Textiles and Apparel; World Trade Organisation, IDE-Jetro and OECD

Gereffi G.; 1999; “International trade and industrial upgrading in the apparel commodity chain” Journal of international Economics. Vol.48, Pp37-70.

Godfrey N.; March 2008; *Why is Competition Important for Growth and Poverty Reduction;* Investment Climate Team Department for International Development, London.

Goel D. July 2002; *Impact of Infrastructure on Productivity: Case of Indian Registered Manufacturing,* Working Paper No. 106, Centre for Development Economics, University of Delhi, Delhi.

International Growth Centre (March 2012); Traditional Exports in Zambia; Growth, Employment and Distribution of Wealth and Income; Reference No. F-41007-ZMB-1.

Kamau P. (2010): "China's impact on Kenya's clothing industry" in Harneit-Sievers A., Marks S., and Naidu (eds.) (2010): Chinese and African Perspectives on China in Africa Cape Town, Dakar, Nairobi, Oxford: Pambazuka Press.

Keane J. and te Velde D.W. (2008): The role of textile and clothing industries in growth and development strategies; Overseas Development Institute. Investment and Growth Program; In Eliassen Eirin Ina (2012), Chinese Investors: Saving the Zambian Textile and Clothing Industry, Centre for Chinese Studies, Stellenbosch University, Stellenbosch, South Africa.

Koyi G.; 2006: The Textile and Clothing Industry in Zambia, The Future of the Textile and Clothing Industry in Sub-Saharan Africa, Herbert Jauch/Rudolf Taub-Merz (Eds.).

Koyi G. and Kamwanga J.; 2009: "Impact of China-Africa Investment relations: The case of Zambia": Working draft, African Economic Research Consortium.

Kragelund P.; 2009: "Knocking on a Wide-open Door" Review of African Political Economy Vol.36, No.122 Pp 479-497.

McCormic D. and Rogerson C.M. (eds.) (2004): Clothing and Footwear in African Industrialization: Pretoria: Africa Institute of South Africa: In Eliassen Eirin Ina (2012), Chinese Investors: Saving the Zambian Textile and Clothing Industry, Centre for Chinese Studies, Stellenbosch University, Stellenbosch, South Africa.

Petersen H.E. and Van der Lugt S.; 2010: "Chinese participation in African infrastructural development: The case of the DRC and Zambia" Accessed September 10, 2016: (http//www.ccs.org.za/?cat=6)

Taylor I.; 2006: China in Africa: Engagement and Compromise. London: Routledge

Thomas C. (2005): "Poverty, Development and Hunger" in Baylis John and Smith Steve (eds) (2005): The Globalization of World Politics; London, Oxford University Press.

World Bank and Central Statistics Office Zambia; March, 2015: Mapping Subnational Poverty in Zambia: World Bank Group, 1818 H Street, NW; Washington, DC 20433

Xiaoyang T.; 2014: The Impact of Asian Investment on Africa's Textile Industries; Carnegie-Tsinghua Center for Global Policy, Beijing, China

Websites Accessed

http://allafrica.com/stories/201602110790.html, accessed on February 27, 2017

http://cotton.org.zm/, accessed on January 26, 2017

http://fra.org.zm/about-us/, accessed on February 01, 2017

http://lusakavoice.com/2014/12/12/govt-hands-over-mulungushi-textiles-to-melt-of-tanzania/: accessed on October 10, 2016.

https://www.daily-mail.co.zm/?p=14254: accessed on October 10, 2016

https://www.theigc.org/wp-content/uploads/2012/06/ECIAfricaConsulting-2012-Working-Paper.pdf, accessed on March 01, 2017

http://www.times.co.zm/?p=18471, accessed on January 17, 2017

http://www.zda.org.zm/?q=content/zda-functions, accessed on January 30, 2017

http://www.zamstats.gov.zm/gen/News_Events.php: Accessed on October 8, 2016.

http://www.znfu.org.zm/about_us, accessed on January 26, 2017

http://zambia24.com/news/2016/08/02/mulungushi-textiles-reopens/; accessed on October 10, 2016

https://zambiadailynation.com/2015/11/17/mulungushi-textiles-legal-war-erupts/: accessed on October 10, 2016

LIST OF INTERVIEW RESPONDENTS

1. Public Sector Respondents

No.	Name	Institution	Designation
1.	Ms. Kayula Siame	Ministry of Commerce, Trade and Industry	Permanent Secretary
2.	Mr. John Mulongoti	Ministry of Commerce, Trade and Industry	Director – Industry Department
3.	Mr. Trevor Sichombo	Ministry of Commerce, Trade and Industry	Chief Economist – Foreign Trade Department
4.	Mr. Hans Yamba	Ministry of Commerce, Trade and Industry	Senior Economist - Industry
5.	Ms. Banji Ngandu	Ministry of Commerce, Trade and Industry	Senior Economist - Industry
6.	Mr. Joseph Banda	Ministry of Agriculture	Senior Crops Agriculturist
7.	Mr. Kaluba Mateyo	Industrial Development Corporation	Acting Chief Executive Officer
8.	Mr. Paul Siame[20]	Industrial Development Corporation	Former Executive Manager
9.	Mr. Mulumba Lwatula	Industrial Development Corporation	Business Analyst
10.	Mr. Kuba Kafwimbi	Industrial Development Corporation	Financial Analyst
11.	General Mtonga	Mulungushi Textiles Limited	In-Charge
12.	Mr. Robert Banda	Zambia Development Agency	MFEZ Manager

[20] One of the three top managers dismissed at IDC

2. Private Sector Respondents

No.	Name	Institution	Designation
1.	Mr. Joseph Nkole	Cotton Association of Zambia	National Coordinator
2.	Mr. Humphrey Katotoka	Zambia National Farmers' Union	Senior Economist
3.	Mr. Pontino Tembo	Zambia Chambers of Commerce and Trade	Manager
4.	Mr. Maybin Nsupila[21]	Zambia Association of Manufacturers	Chief Executive officer
5.	Mr. Stephen Kanengo	Unity Garments Limited	Factory Manager
6.	Mr. Ruben G.S.	Sakiza Spinning Mills Limited	Company Manager

3. Cooperating Partners Respondents

No.	Name	Institution	Designation
1.	Mr. Brian Mtonya	World Bank	Senior Private Sector Specialist
2.	Mr. Peter Nuamah	International Finance Corporation	Senior Private Sector Specialist
3.	Mr. Joseph Silavwe	Department for International Development	Investment Analyst
4.	Mr. Sydney Chibabula	African Development Bank	Investment Consultant

[21] Mr. Nsupila was CEO at the time of interview, he has since left ZAM for UNDP.

ANNEX 1: The Textiles and Garments Companies in Zambia

No.	NAME OF COMPANY	PRODUCTS	STATUS	NUMBER OF JOBS
11	Mulungushi Textiles Limited		Not fully operational. Reopened in August 2016. Government (36 percent) discussing with Qingdao Textile (64 percent)	
1	Mukuba Textile Limited	Bed sheets, cotton fabrics for making overalls, mutton cloth	Operational	50
2	Kariba Textiles Limited	Blankets and bed sheets	Operational	100
3	Towel Textiles Limited	Fabric cotton		120
4	City Clothing Factory	Workwear, school uniforms	Operational	50
5	Kays Textiles Limited	Uniforms, mosquito nets, bed sheets, Work-wear	Operational	150
6	Unity Garments Limited	School Uniforms, Work-wear/ protective clothing, Fashion wear	Operational	100
7	Excel Textile Limited	Tents, tarpaulins, mutton cloths, bandages, bed sheets	Operational	300
8	SAKIZA Spinning Mills Limited	Acrylic Knitting Yarn	Operational	160
9	Caress Lingerie Limited	Underwear	Operational	
10	Central Clothing Factory Limited	Work-wear	Operational	
12	Vimal Textile	Weaving	Operational	

Source: *Zambia Development Agency*

ANNEX 2: Cotton Textile Industry in Zambia – Challenges and Possible Interventions

No	Value Chain	Challenge	Interventions
1	Farming	Low yields/ Low cotton seed volumes	(i) Support the Cotton Development Trust (CDT) in seed development (R&D) including consideration of controlled trials of "Round-up Ready" cotton varieties & Bt (GMO) seed that are resistant to herbicides, allow effective weed killing, improve yields and reduce farmer labor. This will require CDT to apply to the National Biosafety Authority to undertake controlled field trials as provided for under the Biosafety Act 2007.
			(ii) Support the production of cotton seed by seed companies
			(iii) Amend the Cotton Act to strengthen collaboration between ginners and producers thereby discouraging pirate buying and side selling.
			(iv) Improve Government extension services to help yield and reduce the outreach burden faced by ginners.
			(v) Provision of equipment by ZNS for hire by small holder farmers.
		Duty on cotton chemicals	Reduce duty on cotton chemicals
2	Ginning	Return to investment by farmers	Provide financial support to cotton farmer groups/cooperatives wishing to go into ginning.
3	Processing: spinning& weaving	Uncompetitive local cotton lint pricing	(i) The Textile and Garment Producers Association must be constituted
			(ii) Zambia Cotton Growers Association and Textile and Garment Producers Association to agree on annual local consumption weighted quantities to be reserved by each Ginner upon which MCTI will issue a certificate for export of surplus cotton lint.

No	Value Chain	Challenge	Interventions
			(iii) Pricing of cotton lint at price index less freight & insurance.
			(iv) Provide financial support to spinning and weaving companies to acquire equipment
		Duty on textile chemicals	Reduce duty on textile chemicals, not manufactured in Zambia, to zero
		Duty on Yarn and cotton cloth	(i) Increase duty on 100 percent cotton yarn to 15 percent
			(ii) Increase duty on 100 percent cotton cloth (grey cloth) to 15 percent
4	Textile and Garment	Second hand clothing/ limited value addition	(i) Increase duty on second hand clothing from US$0.5/Kg to US$1.0/kg in Y2 and to US$1.50/kg in Y3.
			(ii) Only allow the sale of second hand clothing in designated shops with special trading license and criminalize street vending of second hand clothing
			(iii) Reinforce the ban on importation and trading in second hand underwear garments
		Poor quality textile products and garments	(i) Set compulsory standards for blankets, protective clothing, bed sheets, bandages, raw and dyed yarn and storage tents. A 100 percent cotton standard to be imposed on protective clothing.
			(ii) Set Standards for Certification of quality for public procurement
			(iii) Provide financial support to textile and garment manufacturers to acquire equipment.
		Tender Procedures	(i) Train local suppliers in tender procedures
			(ii) Public Institutions to sign Off-take Agreements with local textile manufacturers of 20 percent and 30 percent of all public procurements in Y1 and Y2, respectively
			(iii) Government must limit participation in tenders to

No	Value Chain	Challenge	Interventions
			registered local manufacturers.
			(iv) Government must pay local manufacturers that win tenders within 3 months of delivery
		Unfair trade practices	MCTI to engage SADC and COMESA to seek redress on violations to FTA rules upon submission of complaint by local exporters.
5	Cross Cutting	Lack of skilled human resource	(i) Short term training in cotton and textile/garment sector (TGPA to provide training needs in the sector) (ii) Operationalise the Textile Training Programme at CBU and TEVET institutions.

Source: *Ministry of Commerce, Trade and Industry*

ANNEX 3: Research Interview Questions[22]

Research Topic: Cotton Textile Industry in Zambia: The Economic Viability of Revamping Mulungushi Textiles Limited.

Broad Objective: To highlight factors that should guide the efforts in revamping the Mulungushi Textiles Limited.

Part one: Biodata

Name:	
Institution:	
Position Held:	
Department/Unit	

Part Two: Current State of the Company

1. Have you been to Mulungushi Textiles? If yes, what was your impression?
2. What initial processes (Ginning-Spinning-Weaving-Apparel) is the company ready to engage in currently? Explain
3. When in full operation, what stage of operation (Ginning-Spinning-Weaving-Garment) does Mulungushi Textiles Limited have a comparative advantage? Explain
4. What possible current and future financiers may the company consider in financing the cost of revamping it?
5. How is the current management of the company? How can it be enhanced?

Part Three: Raw Materials

1. How can the company make sourcing of raw cotton adequate and sustainable?
2. What deliberate policies can the company and government make to encourage cotton farming?
3. What's your take on growing cotton under contract/scheme farming?

[22] Extracted only the general questions that were cross cutting among all the selected respondents segments.

Part Four: Supporting structures

1. What government structures support revamping of the company (institutions/policies/strategies)?
2. How available is labor and skill required for the operation of the company?
3. What government policies are in place to support the development of backward and forward linkages in the cotton textile industry? And how can they be enhanced?
4. What is the current and future market for the company's products?
5. How can the company penetrate both the domestic and international markets?
6. How important is the Cotton Textile Industry in the fight against poverty in Zambia?

Part Five: General Issues

1. What are the critical factors that led to the closure of Mulungushi Textiles Limited?
2. What can the company do differently to ensure history does not repeat itself?
3. Are there other countries/companies that went through a similar situation and are now successful in the textile industry that the company can learn from?
4. During the 10 years that the company had been closed, what efforts were made to revamp it? Why did they fail?
5. What lessons have been learnt from the closure and the current efforts in operationalising the company?
6. Do you think it's economically feasible and sustainable to revamp the company? If so, what are some of the things that should be in place and avoided to ensure revamping is a success?
7. Any other comment?

The End…………...Thank you very much!!!!!!